

DOCUMENT RESUME

ED 068 878

CG 007 593

TITLE School Health Guide. Second Edition.
INSTITUTION Iowa State Dept. of Public Instruction, Des Moines.
PUB DATE 71
NOTE 113p.
EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS Health; Health Activities; Health Activities Handbooks; Health Books; *Health Education; Health Facilities; *Health Guides; Health Needs; *Health Programs; *Health Services; Public Health; Pupil Personnel Services; *School Health Services; Schools

ABSTRACT

This guide was designed to serve as a framework for developing a health program in relation to the needs of an individual school's pupils and available community resources. The roles and responsibilities of the various personnel involved in the health program are delineated to provide guidelines for the development of cooperative and coordinated programs to effectively meet the health needs of the school population. The school health program that is suggested is divided into three general phases: (1) health services; (2) healthful school environment; and (3) health education. A number of factors are described, both inside and outside the school, which may determine the success of a health program. These include: (1) the contribution of health related organizations, religious groups, service and social groups and professional organizations; and (2) the attitudes of a variety of health care personnel. (Author/BW)

ED 068878

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

66 007 593

SCHOOL HEALTH GUIDE second edition



FILMED FROM BEST AVAILABLE COPY

871P-757SE

ED 068878

STATE OF IOWA

1971

*

SCHOOL HEALTH GUIDE

Published by

STATE OF IOWA

Des Moines

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Des Moines, Iowa

STATE BOARD OF PUBLIC INSTRUCTION

DR. JAMES M. WALTER, President, Ames
MRS. VIRGIL E. SHEPARD, Vice-President, Allison
STANLEY R. BARBER, Wellman
ROBERT J. BEECHER, Creston
MRS. RICHARD G. COLE, Decorah
MISS VIRGINIA HARPER, Ft. Madison
T.J. HERONIMUS, Grundy Center
MRS. EARL G. SIEVERS, Avoca
JOHN E. VAN DER LINDEN, Sibley

DEPARTMENT OF PUBLIC INSTRUCTION

Administration

PAUL F. JOHNSTON, Superintendent of Public Instruction and Executive Officer
of the State Board of Public Instruction
DAVID H. BECHTEL, Administrative Assistant
RICHARD N. SMITH, Deputy Superintendent

Pupil Personnel Services Branch

Drexel D. Lange, Associate Superintendent
Richard E. Fischer, Director, Division of Special Education

Prepared by:

Fay S. Cleary, R.N.
Consultant
School Health Services

PREFACE

The comprehensive school health program has a dual purpose. First is establishing and reinforcing positive health habits of the school child to enhance the possibility of healthy adult life. The second purpose is diminishing as much as possible whatever interferes with the child receiving optimum benefit from his educational experiences.

Each school develops a health program in relation to the needs of its pupils and the available community resources. This School Health Guide has been prepared by the Department of Public Instruction with the cooperation of the Department of Health to serve as a framework for developing such a program.

TABLE OF CONTENTS

INTRODUCTION.....	1
PURPOSE.....	2
SCHOOL HEALTH PROGRAM.....	3
CONSULTANT SERVICES	
State Department of Public Instruction.....	4
State Department of Health.....	5
SCHOOL ADMINISTRATION.....	6
SCHOOL HEALTH SERVICES.....	7
Facilities.....	8
Emergency Care.....	9
Nursing Practice.....	11
Dental Emergencies.....	12
Suggested Supplies and Procedures.....	14
Health Assessment	
Screening Procedures.....	17
Vision.....	17
Eye Protective Devices.....	27
Hearing Conservation Services.....	29
Speech, Voice and Language Disorders.....	37
Information Guide--Speech and Hearing Referrals.....	40
Immunization Status of Pupils.....	41
Growth Monitoring.....	45
Dental Health Assessment.....	46
General Health Assessment.....	51

Health Record Forms.....	53
Health Services Programs.....	60
Communicable Disease Control.....	62
Communicable Disease Chart.....	65
Immunization Clinics.....	67
Health Department Policies.....	68
Tuberculosis Program.....	74
Nurse Conferences.....	80
HEALTH EDUCATION.....	89
Dental Health Education.....	92
ENVIRONMENTAL HEALTH.....	95
School Employees.....	97
BIBLIOGRAPHY.....	103

SCHOOL HEALTH GUIDE

INTRODUCTION

Optimum health of a child is a prerequisite of modern education. A strong school health program has numerous opportunities to promote the health of pupils and other members of the community. The school environment, the help children receive in solving their health problems, the ideas about individual and community health which they form, and the information and understanding that they acquire about themselves as human beings influence the development of the attitudes and behavior conducive to happy, healthy and usefully productive living.

The second edition of the School Health Guide has been organized to assist the school health personnel in assessing the health needs of the school population, and developing with community coordination, programs to meet the identified health needs and evaluate the program outcomes in terms of improving, maintaining and promoting the health of the school population.

PURPOSE OF SCHOOL HEALTH GUIDE

The School Health Guide is designed to serve as a guide for establishing and maintaining a sound health program in the Iowa Schools.

The roles and responsibilities of the various personnel involved in the health program are delineated to provide guidelines for development of cooperative and coordinated programs to effectively meet the health needs of the school population. In each school district the specific responsibility of those serving the health program will depend on the available professional personnel, the level of their preparation and competence, the available community and area resources, and the scope and importance of the health needs of the school population.

SCHOOL HEALTH PROGRAM

The school health program can be divided into three general phases:

- Health Services
- Healthful School Environment
- Health Education

This division is for convenience in planning and organizing a total school health program. However, in actual practice there are blends and cross-overs between all three phases when coping with any facet of health.

The scope of each phase of the health program in the school is highly dependent upon abilities, qualifications and interest of the school personnel and the general community interest in health care. The variety of health care personnel available to the school population whether supported by the school district or the community, must understand the contributions and limits of each of the professions involved to develop an effective efficient operation. The roles of individual persons will be expanded or restricted to some degree by lack of an availability of the various professional services.

The school health program will be dependent upon the contributions of such resource groups as health related organizations, religious groups, service and social groups and professional organizations.

The school, as part of the community, may share a major responsibility for the development of total community awareness of health needs and processes by which these needs may be met and the health status of the community may be raised and maintained.

STATE DEPARTMENT OF PUBLIC INSTRUCTION

The Division of Special Education, State Department of Public Instruction, provides consultative services in the areas of psychological services, specific learning disabilities, emotionally disturbed, hearing, speech and vision handicaps, mental retardation and school health. The nurse consultant, school health services, can provide assistance in the areas of:

1. healthy school environment, including school safety, hygiene and sanitation
2. health education including curricula and material resources
3. interpreting the roles of various school personnel in the health program
4. interpreting the Code of Iowa and State Departmental Rules and Regulations in relation to school health
5. developing local policies regarding school health
6. interpreting the roles of various personnel in screening procedures and follow-up activities

STATE DEPARTMENT OF HEALTH

The State Department of Health provides consultative services in the areas of environmental sanitation and engineering, communicable disease control, injury control, maternal and child health and public health nursing. Regional Health offices of the State Department of Health are strategically located to provide services in all areas of the state. These Regional offices are one source of Health Department guidance for school districts in developing their total health program.

REGIONAL OFFICES

Regional Health Service #1
Box 70
Manchester, Iowa 52057

Regional Health Service #2
1104 First Avenue North
Fort Dodge, Iowa 50501

Regional Health Service #2B
Box 1443
Mason City, Iowa 50401

Regional Health Service #3
City Hall
Spencer, Iowa 51301

Regional Health Service #4
35 North Main Street
Council Bluffs, Iowa 51501

Regional Health Service #5
East 7th and Court Street
Des Moines, Iowa 50309

Regional Health Service #6
Box 149
Washington, Iowa 52353

Assistance from the State Department of Health may be requested through these Regional Offices. The Regional public health supervising nurse is in the best position to organize consultative services for the local school nurses in the areas of:

1. health services program planning and evaluation
2. developing a health records system
3. obtaining consultative services in preventive medicine, dental health, maternal and child health, environmental engineering and sanitation and other agencies
4. planning periodic in-service programs for the school nurses and assisting in acquainting school nurses with new health programs, materials and films
5. interpretation of community, county and state resources such as Social Welfare, Family Service Agencies, State Services for Crippled Children, etc.
6. recruiting school nurses

SCHOOL ADMINISTRATION

The local board of education has the responsibility for developing policies which form the basis of the health program. The school administration has the responsibility for the development, interpretation and maintenance of the school health program. School nurses, medical and dental advisors, special education personnel, custodial and maintenance personnel, lunch room personnel, and teachers contribute to the total school health program.

The school administration may find it helpful to create a school health advisory group consisting of representatives of the related professional groups (medical, osteopathic, dental educational groups), parents, community agencies and service organizations. This group may serve liaison purposes providing lines of communication between the school and community interpreting goals and needs of the school health program in relation to community resources.

It is recommended that school district boards of education make provisions for a medical advisor or advisory group in cooperation with the County Medical Society and the County Dental Society to whom the school health personnel may turn for guidance in developing relevant health procedures.

The school nurse has a leadership role in defining her functions, responsibilities and nursing practice as defined by the Code of Iowa within the policies of the local board of education and available community resources.

Assistance with development and modification of the school health programs is available through the consultative services of the various State Departments.

SCHOOL HEALTH SERVICES

The school health services program is designed to improve, promote and protect the health of the school population. By eliminating health hazards and modifying the impact of health handicaps it is expected the child will derive the maximum benefits possible from his educational experiences. The health services program is based on an assessment of the health status of the school population. This assessment should identify the health needs and available relevant resources.

The school, as part of the community, must develop its health service program to effectively coordinate the utilization of present community health and medical care facilities and to familiarize the school population with health maintenance programs which will continue to function following the school years.

The health assessment processes and sickness identification procedures should be utilized to teach useful methods of personal health assessment, so the recipient may learn signs and symptoms within himself, which should be the basis for seeking relevant care from resources.

Many people representing a variety in educational preparation will be making specific contributions to the health services program. These include: volunteers, aids, attendants, clerks, technicians and professionals. Each person should be assigned responsibilities and activities within his area of competence. Roles, responsibilities and structured lines of communication must be clearly identified before implementation of the program to prevent gaps, duplication and confusion.

This School Health Guide suggests areas of expected competencies for various personnel. However, each school district must modify the roles to accommodate the available personnel and resources to attain the most effective program in the local situation.

HEALTH SERVICES FACILITIES

The school administration has the responsibility for providing facilities and supplies for the health services program. The school nurse usually has the responsibility for maintaining supplies and equipment in the health services room.

Emergency care is only one phase of the health services, although it is often given the greatest emphasis. To provide for emergency care the health office should contain:

1. sink with running hot and cold water
2. file cabinet with lock for records
3. desk and chair for nurse
4. at least one cot for a sick or injured child, plastic covered pillows and washable blankets
5. first aid equipment and supplies stock. (Some first aid supplies should be distributed throughout the building to have them readily accessible to the classroom teacher.)

With the developing emphasis on health promotion and maintenance, the school nurse will be spending an increasing amount of her time in conference with individuals. To provide for the optimum understanding there is need for confidentiality to be insured by privacy. It is important for the school nurse to have space in the health area, for private face to face and telephone conversations.

EMERGENCY CARE

Every school should have written emergency care procedures, approved by the local medical society and physicians, providing service to the population. These procedures are first aid measures to be followed in case of sudden illness or injury occurring during school.

Each individual in the school population should provide the school with emergency information which includes the following:

1. name of person to be notified (parent, guardian, relative or responsible adult) where they may be contacted.
2. name of physician or hospital which the family or person relies on for care.
3. any physical condition which may precipitate an emergency situation such as diabetes, epilepsy and asthma.

Although nurses are experienced in the care of the sick and injured, diagnosis and treatment of these situations is limited to the physician by statute. In schools, first aid must be provided and referral to physicians is necessary before treatment can be implemented. The school nurse may be assigned the responsibility for maintaining the first aid supplies and equipment, it is essential that other faculty members be prepared to give emergency care according to the written procedures.

In case of injury or sudden illness of a pupil, the school has the responsibility for (a) giving immediate care--first aid, (b) notifying parents or guardian, (c) arranging for child to go home, and (d) guiding parents when necessary to sources of treatment. In very serious emergencies the individual should be sent to the hospital previously designated by the parents or if an adult designated by himself.

Sick or injured children should not be sent home unless accompanied by an adult and a responsible adult is in the home to receive them. The member of the faculty who makes notification should be prepared to help uncertain parents decide what is to be done for the child. The faculty should be familiar with public and private treatment facilities.

Diagnosis and Medication

Only a licensed physician is qualified to make a diagnosis. If there is reason to suspect a possible health problem, the child's parents should be notified with the suggestion that the child be seen by a doctor.

Absolutely no medication should be dispensed by school personnel or nurse unless written permission has been granted by the child's parents and a prescription is on file from the child's physician.

IN IOWA ONLY A LICENSED PHYSICIAN CAN LEGALLY PRESCRIBE DRUGS INCLUDING THOSE PURCHASED WITHOUT A PRESCRIPTION SUCH AS ASPRIN AND VITAMINS.

When a child is to receive medication during school hours, the following policy should be followed.

- a. written instructions over prescribing doctor's signature including name of drug, duration and frequency of medication and name of child must be on file in school before any medication is given.
- b. written permission over parent's signature must also be on file.
- c. under no circumstances should the drug be furnished by the school.
- d. should a physician request that a drug be left in charge of a nurse or school official to be given to a child at prescribed periods, the drug must be labeled with the name of the child, name of the medicine, time of day it is to be given, duration it is to be given and name of physician.

NURSING PRACTICE IN SCHOOLS

CODE OF IOWA

Chapter 147 Section 1 Definitions

For the purpose of this and following chapters of this title:

2. "Licensed" when applied to a ...nurse...shall mean a person licensed under the title
3. "Profession" shall mean...nursing...
4. "Department" shall mean the State Department of Health

Chapter 147 Section 1 Nursing defined

For the purpose of this title any person shall be deemed to be engaged in the practice of nursing as a registered nurse who performs any professional services requiring the application of principles of biological, physical or social sciences and nursing skills in the observation of symptoms, reactions, and the accurate recording of facts and carrying out of treatments and medications prescribed by licensed physicians in the care of the sick, the prevention of disease or in the conservation of health.

For the purpose of this title the practice of nursing as a licensed practical nurse shall mean the performance of such duties as are required in the physical care of a convalescent, a chronically ill or an aged or infirm patient, and in carrying out such medical orders as are prescribed by a licensed physician or nursing services under the supervision of a registered nurse.

The interpretation of Chapter 152, Section 1, is that registered nurses may give medication which has been prescribed by a physician. Prescribed is interpreted as written prescription over the written signature of the prescribing physician.

The licensed practical nurse must be under supervision of a physician or registered nurse if she is to carry out any medical or nursing procedures.

The Code of Iowa gives permission to prescribe medication and treatment to the licensed physicians. Which is interpreted to be a limiting statement--i.e. only physicians can prescribe medication and treatments.

Dental Emergencies

Dental emergencies usually occur as a result of either neglect or accidents.

Acute infections with accompanying pain and discomfort can be prevented through regular dental care. When they do occur, immediate referral to the dentist and later follow-up is necessary not only to obtain prompt treatment of the emergency but to insure further comprehensive treatment in order to prevent future emergencies. Accidents may involve either hard or soft tissues, or both, and will vary in severity from a bruised lip to a jaw fracture. Many injuries will require immediate attention by the dentist. First aid measures for soft tissue injuries include pressure to control hemorrhage and cold compresses to control swelling.

Accidents to the teeth are serious occurrences. Even a traumatic blow of insufficient force to loosen or fracture the tooth may have serious consequences. If immediate attention is not indicated, a notification to the parent should recommend early examination by the dentist. The action immediately after the accident may determine the retention or loss of the tooth. Since the upper front teeth are the most frequently injured, the loss can have serious impact on the future appearance and personality of the individual in addition to his future oral health. If a tooth is loosened, fractured, partly or completely evulsed, the child must see the dentist immediately for proper care. In the case of a tooth being completely evulsed, reimplantation may be possible if the tooth is recovered, wrapped in moist gauze and hastened to the dentist.

The form on page 49 may be used to notify parents of the necessity for giving immediate attention to obtaining dental examination and treatment for their child.

The nurse should constantly impress on children the danger of unsafe practices and insist on adherence to safety procedures. Children should be taught the:

- a. proper method of walking up and down stairs
- b. proper use and handling of playground equipment
- c. danger of putting foreign objects in the mouth
- d. special danger from running with sharp end of pointed objects in the mouth
- e. damage that can occur from biting on hard objects, such as pencils, bobby pins, nuts, etc.
- f. danger in pushing, shoving, tripping, etc.
- g. danger in careless riding of bicycle
- h. danger in careless throwing of objects

Physical education personnel should be reminded periodically of the importance of use of mouth protectors when athletes are engaged in either the practice or play of contact sports. When injuries do occur, in addition to obtaining the necessary treatment and evaluation from the dentist and/or physician, recommendation

should be sought for general or specific measures to be taken to prevent further injuries.

SUGGESTED FIRST AID SUPPLIES AND PROCEDURES

First Aid Supplies Every School Should Have:

adhesive tape	bandages (different sizes)
sterile gauze squares (different sizes)	pair of scissors
band-aids	thermometers and thermometer holders
pair of tweezers	alcohol
phisoex or dial soap	padded wedge tongue protector
absorbent cotton	splints or fracture supports

Suggested First Aid Procedures

Bruises

Rest injured part. Apply cold compresses for half hour (no ice next to skin). If skin is broken, treat as a cut.

Scrapes

Use wet gauze or cotton to sponge off gently with clean water and soap.

Cuts*

Small--wash with clean water and soap. Hold under running water. Apply sterile gauze dressing.

Large--apply dressing. Press firmly to stop bleeding. Bandage. Secure medical care.

NOTE: Do not use iodine or other antiseptics before the physician sees the patient.

Puncture Wounds*

Consult physician.

Slivers*

Wash with clean water and soap. Remove with tweezers or forceps. Wash again. If large or deep, consult physician.

Bites or stings*

Insect--remove stinger if present. Cold compresses. Consult physician promptly if there is any reaction. Observe child closely, especially if he has fair skin and/or a history of allergies.

Animal--wash with clean water and soap. Hold under running water for two or three minutes if not bleeding profusely. Apply sterile dressing. Consult physician.

NOTE: If possible, catch or retain the animal and maintain alive for observation regarding rabies. Notify police or health officer.

Snake* (nonpoisonous)--wash area with soap and water. No further treatment necessary.

Snake (poisonous)--(keep calm--work fast). Complete rest. Apply constricting band above the bite (not too tight). Get victim to physician or hospital as soon as possible.

Burns and Scalds

Burns of limited extent*--if caused by heat: Cover with gauze and bandage lightly. Consult physician.

If caused by chemicals: Wash burned area thoroughly with water. Consult physician.

Extensive Burns*--keep patient in flat position. Remove clothing from burned area; if adherent, do not remove. Cover with clean cloth. Keep patient warm. Take patient to hospital or to physician at once.

NOTE: Do not use ointments, greases, powder, etc. Electric burns with shock may require artificial respiration.

Fractures

Any deformity of injured part usually means a fracture. Do not move person if fracture of leg or back is suspected. Summon a physician at once. If person must be moved, immobilize the part in its present position with splints. Application of air pressure splints must be done with extreme caution. The entire extremity should be encompassed by the splint. The air pressure splint serves as a tourniquet for any part extending beyond the distal end of the splint.

Sprains

Elevate the injured part if possible and support. Apply cold compresses for half an hour. Do not use injured part until seen by a physician.

Eyes

Do not rub any speck or foreign body that gets into the eye. Lift the upper eyelid over the lower lid and let tears wash out the particle. If the speck doesn't wash out, keep the eye closed with a light dressing and seek medical attention.

For a blow to the eye or a "black eye," apply cold compress immediately for about 15 minutes. A black eye could mean serious internal damage to the eyeball and should be seen by a doctor.

Bandage a cut eye lightly with a sterile gauze patch and call a doctor immediately. An eye with a cut, puncture, abrasion, etc., should not be washed with water. Do not try to remove an object stuck in the eye. An eye burned with a chemical should be flooded with water immediately for approximately 15 minutes. Hold the head under a faucet or pour cool water into the eye from a glass, pot, kettle, etc. DO NOT USE AN EYE CUP. Burns, especially those from chemicals, should be examined by a doctor as soon as possible.

Nosebleeds

In sitting position blow out from the nose all clots and blood. Into the bleeding nostril insert a moistened wedge of cotton. With the finger against the outside of that nostril apply firm pressure for five minutes. If bleeding stops leave packing in place and check with your doctor. If bleeding persists, secure medical care.

*Protection against tetanus should be considered whenever the skin is broken or for burns, even if skin appears intact.

Fainting and Unconsciousness

Keep in flat position. Loosen clothing around neck. Summon physician. Keep patient warm. Keep mouth clear. Give nothing to swallow.

Convulsions

Consult physician. Lay on side with head lower than hips. Apply cold cloths to head. Sponge with cool water. Give nothing by mouth.

Head Injuries

Complete rest. Lie flat and level. Consult physician.

Poisoning

Call physician or nearest hospital emergency room at once. As soon as possible induce vomiting.

Exceptions: Vomiting should not be induced if the child has swallowed kerosene or other petroleum products, furniture polish, insecticides, paint thinner or a strong corrosive such as lye or acids. Vomiting should not be induced if the child is unconscious or convulsing.

To Induce Vomiting: Give glass of water or milk. Then tickle back of throat with blunt end of a spoon. Keep child face down with head lower than hips while vomiting to avoid choking.

Choking

If a child chokes, turn him head and face down over your knees and forcefully hit his back between shoulder blades in an effort to propel the object from the windpipe. If he can breathe, do not attempt this maneuver.

Artificial Respiration

To be used for drowning and electric shock. Continue artificial respiration until seen by a physician.

RESCUE BREATHING TECHNIQUE

Clear the throat--wipe out any fluid, vomitus, mucous or foreign body with fingers.

Place victim on his back.

Tilt the head straight back--extend the neck as far as possible.

(this will automatically keep the tongue out of the airway)

Blow--with victim's lips closed, breathe into nose with a smooth, steady action until the chest is seen to rise.

Remove mouth--allow lungs to empty.

Repeat--continue with relatively shallow breaths, appropriate for size, at rate of about twenty per minute. For infants only shallow puffs should be used.

NOTE: If you are not getting air exchange, quickly recheck position of head; turn victim on his side and give several sharp blows between the shoulder blades to jar foreign matter free. Sweep fingers through victim's mouth to remove foreign matter.

DO NOT STOP. If one can observe the chest to rise and fall, all within reason is being done.

7. Suggested Thermometer Techniques

Viruses resist ordinary methods of disinfection; therefore it is recommended that suggested thermometer techniques be followed.

Cleaning of Thermometers

1. Wipe thermometer with dry cotton pledget after removing from mouth.
2. Moisten a cotton pledget with a solution of equal parts of tr. of green soap and 70% alcohol. Wipe down using rotary motion.
3. Rinse under running water, holding thermometer down. Wipe dry.
4. Return to vial of solution of 70% isopropyl alcohol with 1% iodine.

Allow 10 minutes before using again.

For effective disinfecting of rectal thermometers, it is essential that the lubricant be completely removed. A water soluble lubricant, such as surgical jelly, is effectively removed by the usual cleansing method. Oily or greasy lubricants are difficult to remove and they harbor pathogenic organisms.

Storage of Thermometers

Thermometers are to be stored in vials containing a solution of 70% isopropyl alcohol with 1% iodine. This 1% solution is made by adding 5 drops of iodine to one ounce of isopropyl alcohol.

Always keep sufficient alcohol in thermometer vials to insure complete submersion of thermometers. Cleanse the vial and change the solution once a week. Complete immersion in this solution for 10 minutes will insure disinfection of thermometers.

If the school is experiencing cases of infectious hepatitis, terminal disinfection should consist of thorough cleansing plus leaving the thermometer immersed in the iodine-alcohol for a period of 12 hours before using again.

SCREENING PROCEDURES

Screening procedures are not to be considered diagnostic procedures. They are part of the health appraisal program to detect children who may need further attention in specific areas. Screening procedures may be performed by teachers, clinicians, nurses, dental hygienists, technicians or volunteers. Determination of the types of tests to be used and who is to administer them is decided by school administrators, special education personnel and school health personnel. All procedures should be in accordance with local medical and dental societies and/or physicians and dentists in the community.

Regardless of what screening procedures are used, these are only means of reaching specific goals. These goals are: securing a better understanding of the pupil, helping him attain greater effectiveness, and increasing his understanding of healthful living. These goals can only be achieved by appropriate follow-up.

The school nurse is chiefly responsible for follow-up. She notifies parents of children whose screening tests reveal apparent deviation, and helps them to find professional evaluation and treatment when indicated. Unless follow-up work is done to secure correction of defects, screening programs are ineffective. A personal visit to the home by the nurse is much more effective than a written note or a telephone call.

VISION SCREENING PROGRAM

The nurse may carry the major responsibility for planning the vision screening program in the school. Also involved in planning this program are teachers, whose classroom program must be modified to cope with the interruption for this. Other personnel in the school who may be affected by this program should be alerted to the time, place and duration of the various phases of the program.

The school nurse works with teachers and volunteers in administering the screening. The nurse will have the major role in rescreening those children who revealed some difficulty in the first screening.

The rescreening procedures include another attempt at visual acuity assessment and collection of behavioral data which may or may not support the possibility of visual acuity limitations.

The purpose of the screening and rescreening for visual acuity is to detect those children who sufficiently deviate from established "normal" standards to warrant professional evaluation. Therefore, it is important that supportive evidence from teachers and parents be collected and utilized in referrals for professional evaluation.

The school nurse should discuss with the local eye doctors the criteria for referral of children suspected of having visual acuity problems. The National Society for the Prevention of Blindness advises that a practical criterion for referral with the Snellen E Chart has been found to be vision of 20/40 or less for children in kindergarten through grade three. This designation of 20/40 or less means inability to identify accurately symbols on the 30 foot line of the Snellen E Chart when at a distance of 20 feet.

The National Society for Prevention of Blindness suggests that 20/30 or less be used as criterion for children in fourth grade and above. Again this means the inability to identify letters or symbols on the 25 or 20 foot line of the Snellen Chart when at a distance of 20 feet.

After the children have been screened and those revealing difficulties achieving the criteria, identified and rescreened, the school nurse should plan a conference with the teachers of these children to identify any demonstrable evidence observed in the classroom. The child who is experiencing difficulty with distance visual acuity will often squint, cock or turn his head, when possible, move closer or give inappropriate responses to requests based on visual information that is at a distance from him.

The child may also rub his eyes, ask children nearby for clarification or complain of headaches. He may not follow work presented from across the room very effectively. Also one might expect the child to have some difficulty in playing games which require distance acuity like baseball.

The child having close range visual acuity problems will frequently demonstrate reading difficulties, often look at other children's work for guidance, but be attentive to information presented at a distance from him. Often teachers are aware of this behavior in children and when questioned about specific behaviors will reinforce the suspicions of visual acuity difficulties resulting from the screening procedures.

When support for suspected visual acuity inadequacies has been established the nurse contacts the parents to inform them of the situation and requests that a professional evaluation be made by the family eye doctor. The nurse assists the family and child to gain understanding of the impact of any visual limitations on the child's educational program or other activities. The nurse is presenting to the family the results of a screening. The screening program has identified a child who, based on the collected evidence, MAY have a visual acuity problem. This does suggest the need for professional evaluation to establish the true visual acuity situation and implement any available remediation procedures by the

professional examiner. This screening is not diagnostic but should serve to eliminate from professional visual evaluation those children who appear to have no problems. Some children, who readily meet the visual acuity criteria established by the school and approved by the local eye doctors, may still have visual acuity problems. Any child who complains of headaches or demonstrates behavior suggestive of visual acuity limitations should be referred to the family eye doctor for professional evaluation.

The health record should reflect these visual acuity problems; visual acuity, date of screening, any corrective measures or procedures and changes that occur through the child's school years.

Although there is question about the exact etiology, it has been established that children in the growth spurt years do have marked changes in visual acuity. For those children previously diagnosed as myopic, the degree of myopia seems to increase as well as an increase in the incidence of myopia.

Children who are wearing glasses should have a conference each fall with the school nurse to establish the date of last visit to the eye doctor. If over a year ago, they should be encouraged to have another evaluation. The amount of correction needed is likely to vary with the growth of the child. At this time the lens should be inspected for scratches which will interfere with clear vision.

Some children do not like to wear glasses even when needed. The myopic child may wear glasses only when he feels he needs them. Not wearing his glasses is unlikely to affect his visual acuity although it may limit his distance vision.

The child whose visual acuity is not the same in both eyes will tend to use the better eye. This will allow the poorer eye to be idle and the acuity may deteriorate in this eye as an amblyopia.

VISION SCREENING PROCEDURE

Depending on the knowledge and sophistication of the children, the event of the vision screening may be an opportune time for the classroom teacher to present a unit on care and function of the eyes. When the vision screening is done very early in the school year, the teachers are aware of an individual child's vision problem. She then has the opportunity to make possible adjustments in the classroom situation to lessen the child's handicap until remediation can be accomplished.

At the time of vision screening, the school personnel are alerted and a review of the eye protection laws of the State be made to insure that everyone understands the requirements and liabilities.

Preparing the Students

Before the screening procedure takes place, children should be taught that this is a screening procedure to assess their visual acuity. An understanding of the procedures should be established. Visual acuity should not be confused with knowledge to recognize letters by name. If the letter chart is to be used, especially in lower grades or with low ability pupils, the child's knowledge of the letters must first be established by having him name each of them at close range. Any questions about this ability would precipitate the use of the symbol chart.

VISION SCREENING PROCEDURES

The choice of vision screening methods should be determined by:

1. overall objectives of the visual acuity assessment program
2. available personnel and facilities for screening and follow-up resources
3. number of children to be screened
4. time available for vision screening of each child
5. age group of children to be screened

Of the screening procedures now used, it has been demonstrated that the properly used Snellen Chart combined with teacher observations give results agreeing most closely with clinical judgement. The Snellen Chart screening method does miss those children needing care who can sometimes be identified by classroom behaviors. However, this method is not as likely to refer for professional evaluation, children whose visual acuity is within normal range. In those school districts where limited follow-up and treatment facilities are available, little would be gained with larger number of referrals. However, those school districts with better follow-up and treatment facilities may prefer to use a multiple procedure screening method.

While no better method exists than the Snellen Chart method to identify distance visual acuity, vision screening machines can, in addition, screen for near vision muscle balance and hyperopia. Machines can be used in an area of less than 20 feet. Disadvantages of machines are that it is a time consuming method and is expensive in terms of equipment and personnel. Personnel costs can be reduced by use of trained volunteer help in the screening procedures.

USE OF SNELLEN CHART

1. The chart should be well lighted with constant illumination. Avoid glare or direct light in the pupil's eyes. General room illumination should not be less than one-fifth the chart illumination.
2. Hang the Snellen Chart at the 20-foot line on the level with the pupils eyes. If strips of adhesive tape are fastened to the top of the chart, it can be readily adjusted to any required level.
3. A reasonable degree of quiet and privacy should be maintained.
4. Instruct pupils of the procedure before beginning screening. Small children may be provided with a cardboard "E" with which to indicate the direction of the symbols on the chart.
5. Seat pupils exactly 20 feet from the chart.
6. Cover the eye not being checked with a 3 x 5 inch stiff card resting against the nose. Avoid touching the eye.
7. Check the right eye, the left eye, then both eyes together.
8. Begin with the 20/40 line. Show one symbol at a time. Indicate the symbol to be read, by window card for grades K-3 and by pointer for grades 4-12.
9. If a child wears glasses, he should be checked first with his glasses on, then without them.
10. Record for each eye the smallest line that is read with not more than one error. In recording, the result is written as a fraction. The numerator is the distance from the screen. The denominator is the line read. For instance, if the 30-foot line is read with no more than one error, the result is written as 20/30.
11. Note and record any symptoms of visual difficulty such as squinting, frowning or leaning forward. Crossed eyes and head tilting should always be reported. When symptoms of eye strain are observed to be frequent and persistent and a student's report of his visual difficulties is voluntary, they are considered to be cause for referral.
12. Screening results of 20/40 or less in either or both eyes for grades K-3 and 20/30 or less in either or both eyes for grades 4-12 should be reported to the school nurse for rechecking and subsequent referral.

At present there are no studies that describe the impact of color blindness on elementary school achievement. However, primary teachers should be alerted to such a possibility when the child has continued difficulty identifying or matching colors.

VISUAL ACUITY ASSESSMENT PROGRAM
OUTLINE OF ROLES
NURSING AND SPECIAL EDUCATION PERSONNEL

Often the school nurse and volunteers are the major personnel involved in the visual acuity assessment program. Where the number of pupils is great there are often special education personnel available to assist the health services programs through coordinating roles and cooperative efforts. Establishing roles and responsibilities of the involved personnel will prevent useless duplication and costly gaps in the services. The following outline suggests roles of the school nurse and of special education personnel. Each school district will need to establish its own pattern depending on personnel and material resources available.

VISUAL ACUITY ASSESSMENT PROGRAM
AN OUTLINE OF ROLES
IN
NURSING AND SPECIAL EDUCATION PERSONNEL

SCREENING: To determine which individuals appear to deviate sufficiently from established "normal" standards to warrant further evaluation.

ROLE OF NURSE

1. Assists in planning of vision screening programs.
 - a. cooperates with school administrators and other professional persons in the community in selection of methods to be used in screening.
 - b. assists with development of criteria for referral.
2. Helps classroom teacher and/or others conducting vision screening program.
 - helps teacher with arrangements (time, place, etc.)
3. Interprets vision screening programs and the relationship of nursing service to special education, school personnel, parents and children.
4. Assists with collection of data on screening program.

ROLE OF SPECIAL EDUCATION PERSONNEL

1. Has responsibility for planning vision screening programs.
 - a. encourages school administrator to provide technical assistance, materials, time, etc., for screening program.
 - b. helps determine the criteria for referral.
2. Provides materials for screening to teachers and others.
3. Interprets vision screening program and the role of the special education worker to the nurse, school personnel, parents and children.
4. Has responsibility for collecting data on screening program and setting a deadline for the completion of a program.

5. Assists with evaluation of the findings of the screening program and teacher observation of eye difficulties to determine the children with suspected vision handicaps.

5. Helps evaluate the results of the screening program and teacher observations to determine children who may be in need of follow-up.
6. Provides educational consultation.

FOLLOW-UP: Work with concerned persons about the indicated problems or condition on a continuing basis until there is a better understanding and willingness to carry through recommended preventive, corrective or remedial measures.

ROLE OF NURSE

1. Assists in planning for a follow-up program.
--arranges for further screening for those who have difficulty on first screening.
2. Informs the child's parents of screening findings.
 - a. assists the family to gain an understanding of the child's vision screening results and explains the need for professional evaluation.
 - b. shares health information with physicians and others who are working with the child's vision problem.
3. Assists in maintenance of a cumulative health record that shows vision screening results and follow-up care.
4. Encourages community organizations in promotion of vision conservation.
5. Helps in the development of an eye safety program in the school and community.
 - a. assists in the development of a teaching unit on vision screening and eye health and safety.
 - b. provides the school personnel information about Iowa eye safety laws:
 1. protective devices use standards
 2. responsibilities of classroom teachers in eye safety.

ROLE OF SPECIAL EDUCATION PERSONNEL

1. Coordinates planning for a follow-up program.
 - a. solicits support from school administration and community groups for follow-up of visually handicapped children.
 - b. shares information about child's educational needs in relation to the child's vision difficulty with school personnel.
2. Provides educational help for children with vision problems that hinder academic progress.
 - a. arranges for the loan of recommended materials from the Division of Special Education.
 - b. interprets and instructs teachers and parents in the use of specific sight-saving equipment and supplies.
3. Maintains a record on children with visual problems.
4. Promotes interest in the vision program to community organizations.
5. Encourages school administrators and teachers in the development of eye safety program.
--develops teaching materials to be used to explain vision screening, and the eye health and safety.

REFERRAL: A formal request (preferably written) for service of one agency or person to another concerning a problem.

ROLE OF NURSE

1. Initiates referral when it appears that a person has needs which nursing service cannot meet completely.
2. Maintains contact with and provides necessary service to the child referred until such a time as nursing service is not needed.
3. Requests and shares information with other disciplines.

ROLE OF SPECIAL EDUCATION PERSONNEL

1. Initiates referral when it appears that a person has needs which special education service cannot meet completely.
2. Maintains contact with and provides necessary service to the child referred until such a time as the service of special education is not needed.
3. Requests and shares information with other disciplines.

Suggested Letter to Parents of Children
Who Should be Referred for Professional Vision Examination

Dear Parents:

Because we know how important your child's eyes are to him and to his future the _____ (name of school district) conducts a periodical vision screening survey.

During the vision screening survey at _____ school on _____ (date), it was found that your child _____ (name of child), appeared to have some difficulty seeing as clearly as he should. This does not necessarily mean that new glasses will be needed, but we advise that you arrange a vision examination in the near future if your child's eyes have not been examined recently.

We understand that many times doctors cannot prescribe glasses or lenses which will completely correct vision problems. If an examination has been made recently, please advise us so that our health records may be kept current.

(A paragraph may be added to request the return of the forms).

Sincerely,

Name

Title (School Nursing, Special Education)

VISION REPORTS

An annual summary report of vision screening activities and information regarding legally blind children is to be prepared by school and public health personnel and sent to the county school superintendent.

To the Division of Special Education an annual report should include the following information:

School District-

Number of pupils screened	by whom
Screening method used	
Number referred for professional evaluation	
Number seen and corrections done--	
Number with future appointments--	
Number seen-no corrections	
Number not seen--	
Number--Lack of available professionals	
Lack of available finances	
Lack of action by family	
other problems in family	
Apparent lack of interest	
other reasons	

Legally Blind

Definition: All pupils who have central visual acuity of 20/200 or less in the better eye with correcting lenses or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees.

Each year, usually in January, the Division of Special Education requests the following information about every legally blind pupil in each school: name, age, grade, and visual acuity in left, right and both eyes.

Also the name, age, grade of all legally blind students who have attended and were included in the last reports, but are no longer in the school. If the student is known to have transferred to another district this information is helpful in keeping Division records current.

State of Iowa
Department of Public Instruction
Career Education Branch

CODE OF IOWA-280.20

An Act to require the wearing of eye protective devices by students and teachers.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

Section I. Every student and teacher in any public or private school or college or university participating in any of the following courses:

1. Vocational or industrial arts shops or laboratories involving experience with any of the following:
 - a. Hot molten metals
 - b. Milling, sawing, turning, shaping, cutting, grinding, or stamping of any solid materials
 - c. Heat treatment, tempering, or kiln firing of any metal or other materials
 - d. Gas or electric arc welding
 - e. Repair or servicing of any vehicle
 - f. Caustic or explosive materials
2. Chemical or combined chemical-physical laboratories involving caustic or explosive chemical or hot liquids or solids; when risk is involved.

Shall wear industrial quality eye protective devices at all times while participating and while in a room or other enclosed area where others are participating in any phase or activity of such course which may subject the student or teacher to the risk or hazard of eye injury from the materials or processes used in said courses. Visitors to such shops and laboratories shall be furnished with and required to wear the necessary safety devices while such programs are in progress. It shall be the duty of the teacher or other person supervising the students in said courses to see that the above requirements are complied with. Any student failing to comply with such requirements may be temporarily suspended from participating in said course and the registration of a student for such course may be cancelled for willful flagrant or repeated failure to observe the above requirements. The Board of Education or governing agency having jurisdiction of any school coming within the purview of this Act shall provide the safety devices required herein. Such devices may be paid for from the general fund but the board may require students and teachers to pay for said devices and shall make them available to students and teachers at no more than the actual cost to the district.

"Industrial quality eye protective deivces," as used in this section, means devices meeting the standard of the American National Standard Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection promulgated by the American National Standards Institute, Inc.

Footnote: All sections that are in bold represent changes in the school eye safety law due to amendments (House File 1188) of the 1970 legislature. This newly revised law will become effective July 1, 1970.

HEARING CONSERVATION SERVICES

Hearing conservation should be an important part of every school health program. Hearing loss often goes undetected because it is a "hidden" handicap. Yet it is as devastating to the educational, emotional and social development of the child as any of the more obvious handicaps.

The Hearing Conservation Program is defined as a program of services. Its ultimate goal is to help hearing-handicapped children achieve to the maximum limits of their intellectual capacity the areas of learning which are taught within the framework of school instruction.

The many services provided for children in this total program may be thought of as steps by which sub-goals (which are prerequisite to the attainment of the program's ultimate goal) are achieved. This program is best administered under the supervision of a Director of Special Education.

Prevention services are basic to the total program. Administrators, teachers, nurses, hearing clinicians, speech clinicians and other educational personnel, physicians, various agencies, the mass communications media, and civic minded citizens work individually and together. Their goal is to educate the community concerning the causes of hearing loss and the means by which hearing loss caused by some forms of trauma, neglect, or ignorance may be averted.

Case finding services, sometimes referred to as discovery services, are performed by professional personnel utilizing standardized, accurate, scientific equipment and valid screening and threshold testing procedures and techniques. The individuals best professionally prepared and trained to perform these types of services are hearing clinicians, audiometrists, or audiometricians, audiologists, hearing conservation consultants, and speech clinicians in instances where the previously mentioned specialists are not available.

The individuals best qualified to perform medical diagnosis, evaluation and medical therapy by ear specialists (otologists) or other physicians the local medical society designates as being competent to do so.

Public health nurses and school nurses are best prepared and utilized in case finding not involving testing, and coordinating medical follow-up services with respect to securing parent cooperation; keeping the professional personnel (concerned with other hearing conservation services) and helping to channel physicians' recommendations and findings efficiently to concerned personnel. Rapidly advancing knowledge regarding children with hearing difficulties and the greater availability of specialized school personnel has freed the school nurse from much of the screening process and allowed her more time to work with parents for medical evaluation and remedial care for the handicapped child.

In delineating functions every effort was made to utilize the knowledge and skill of health and education disciplines to the best possible advantage. As a result, major responsibility in some phases of the program is carried by the special educator with the nurse in a supportive role, while in others, the major responsibility belongs to the nurse with the special educator in a supportive capacity. The team approach should be the core of all aspects of a program designed to help meet the health and educational needs of hearing-handicapped children.

Hearing conservation consists of four minimal services: Awareness, Prevention, Case Findings, and Referral and Follow-up.

1. Awareness

In those areas which do not have an organized hearing conservation program, the first step is for the nurse and special education personnel to work together to create an awareness in the community and to establish a need for a hearing survey. They can plan the survey, interpret its purpose to the related professional and health agencies in the community, and formulate plans for further appropriate programs for individuals found to have a hearing deficit.

2. Prevention

The nurse and special education personnel work in cooperative and coordinated effort in prevention services. Prevention consists of:

- a. educating the community concerning the causes of hearing loss and how some losses may be averted. Instruction within the health education curriculum for school children is important
- b. efforts as part of the total program, to remedy or alleviate where possible, hearing loss in children where it is found to exist
- c. all personnel working in this service using such channels as the Hearing Conservation Committee (state and local), newspapers, radio and television, professional literature, discussion groups, parent, civic and service organization meetings
- d. Supporting Better Hearing and Speech Month (usually May)

3. Case Finding Services

Case Finding Services refers to three specific areas of concern: routine auditory screening, threshold testing, and high-risk children, repeated URI & draining ears, premature children, delayed speech and language development.

A SCREENING: A procedure to determine which individuals appear to deviate from established normal standards.

Nurse's Role

- (1) Assists with the planning of the screening program
- (2) Cooperates in administration of the screening program

- (3) Interviews children who fail to pass screening to ascertain if ill
- (4) Helps interpret and evaluate results of screening

Threshold testing--a more detailed study of an individual's hearing acuity.

Nurse's Role

- (1) Assists with planning of the threshold testing program

Special Educator's Role

- (1) Directs planning of the screening program
- (2) Directs administration of the screening program
 - (a) selects and contracts volunteer workers (for monitoring, clerical support and such activities)
 - (b) arranges for in-service training of volunteer workers
 - (c) interprets screening objectives to children, parents and school personnel
 - (d) supervises and co-ordinates testing program
- (3) Interprets and evaluates results of screening

Special Educator's Role

- (1) Directs planning of the threshold testing program

- (2) Cooperates in administration of the threshold testing program
(a) assists by collecting information for the examination

- (b) interprets health implications of a hearing problem to child and parent

- (3) Assists with interpretation and evaluation of threshold testing program

- (4) Records or arranges for recording of pertinent information in child's health record

- (2) Directs administration of the threshold testing program
(a) assists by collecting information for the examination

- (b) selects and contracts qualified audiometricians to administer standardized and accurate individual pure tone threshold audiometric evaluations

- (c) interprets educational implications of a hearing problem to child and parent

- (3) Interprets and evaluates threshold testing program

- (4) Records and arranges for recording of pertinent information in the special education files and in the individual cumulative school folder

High Risk children: Those children with repeated URI and draining ears, delayed speech and language development, and premature birth.

Nurse's Role

- (1) Identifies these children from school records and teacher-nurse conference
- (2) Obtains referral from parents or teacher regarding a health condition
- (3) Provides names and information to special educator
- (4) Referral and Follow-up Service

Initiation and implementation of recommendations for those persons who appear to require further health examination, diagnosis and/or treatment.

Special Educator's Role

- (1) Administers threshold audiometric evaluation to these children
- (2) Refers children found to have health problems to nurse

Referral

Nurse's Role

- (1) Initiates referral when it appears that a person has needs which nursing service cannot meet
- (2) Acts on health referrals
 - (a) requests needed information from other disciplines
 - (b) shares pertinent information at regular intervals and upon request
- (3) Maintains adequate records to facilitate continuity of service
- (4) Interprets nursing function to interested persons

Health Follow-up

Nurse's Role

- (1) Develops health follow-up program which assures hearing impaired children of systematic health attention
- (2) Coordinates functions associated with health follow-up program
 - (a) assists parents in arranging for child to be seen by family physician
 - (b) supplies family physician with pertinent information and may assist him in arranging for further study of the child
 - (c) supplies special education supervisor with information pertinent to child's educational adjustments

Special Educator's Role

- (1) Initiates referral when it appears that a person has needs which special education service cannot meet
- (2) Acts on educational referrals
 - (a) requests needed information from other disciplines
 - (b) shares pertinent information at regular intervals and upon request
- (3) Maintains adequate records to facilitate continuity of service
- (4) Interprets special education functions to interested persons

Special Educator's Role

- (1) Assists with development of health follow-up program which assures hearing impaired children of systematic health attention
- (2) Cooperates in functions associated with health follow-up program
 - (a) assists with arrangements for child to see family physician
 - (b) supplies nurse with information pertinent to child's health needs

- | | |
|---|---|
| <p>(3) <u>Stimulates</u> school and community interest and action in the health follow-up program</p> <p>(a) <u>encourages</u> development of and participates in school and community health groups</p> <p>(b) <u>initiates</u> school programs on ear care and safety as well as on general health</p> <p>(4) <u>Maintains</u> adequate individual child and perhaps family records to facilitate adequate health attention</p> | <p>(3) <u>Assists</u> in stimulating school and community interest in the health follow-up program</p> <p>(4) <u>Assists</u> with maintenance of adequate records to facilitate continuous health attention</p> |
|---|---|

Each pupil's cumulative health record should contain a record of every screening test. Before a medical referral, it is advisable to retest the child about four weeks subsequent to the screening evaluation.

Educational Follow-up

Nurse's Role

- (1) Contributes to development of an educational follow-up
- (2) Supplies health information pertinent to the child's educational adjustment
- (3) Assists with interpretation of speech and hearing needs to school authorities and community

Special Educator's Role

- (1) Develops educational follow-up program which provides for preferential seating, speech reading, auditory training, clinical speech services, special class placement, etc.
- (2) Administers the educational follow-up program conducted by the hearing clinician or the speech clinician
- (3) Evaluates speech and hearing services in terms of future needs and interprets these needs to school authorities and community

In order to facilitate the hearing test program and to cause the least possible interruption in the school schedule, the following necessary and preliminary arrangements should be made:

1. *Test Room. Select the room with the least noise in the building.
 - *a. there should be no overhead noise
 - *b. the room should be as far removed from corridors, stairs, street noise, noisy radiators, typewriters, telephones, fans, offices, toilets, and drinking fountains as possible
 - *c. the room should be well ventilated and adequately lighted by natural light or incandescent illumination (Florescent lamps produce a noise and therefore cannot be turned on)
 - *d. the room should be a minimum of 18 feet by 18 feet for Johnston group audiometric testing and 6 feet by 6 feet for individual testing
 - *e. if classrooms are located next to the testing room, it will be necessary to eliminate all moving activities and oral recitations during the testing program
 - f. suggested rooms:
 - *1. "soundproof" music room
 - *2. acoustically treated rooms (not just acoustic ceiling tile)
 - *3. top floor corner classroom (see "b" above)
 - *4. auditorium or theater stage provided no other activities are conducted in the immediate area
 - *5. gymnasium, provided noises from locker rooms do not interfere. Combination gymnasium-lunchrooms are not satisfactory in that kitchen noises are too loud
 - *6. for individual testing a smaller room is adequate, provided that it meets the other requirements
2. Room Equipment: The room should be provided with the following:
 - *1. Table
 - *2. Standard wood or upholstered chairs. (Grades one to six should have small wooden chairs of 12 to 15 inches in height. Seventh grade and above should have standard wooden chairs)
 - *3. Electric outlet for the audiometer. (For Johnston Group Audiometric testing an additional table and 10 wooden chairs are needed in addition)

*3. Quiet Must Be Maintained

Band, chorus and orchestra rehearsals, gymnasium classes, manual training classes, music activities in primary grades, any other program creating disturbing noise must be discontinued while the hearing tests are in progress or scheduled at a distance where the inherent noise of such activities will not create noise in the testing room. The quieter the testing condition, the more successful the results and the greater the reliability of the tests. If the ambient noise level is above 15 decibels on a sound-level meter, tests cannot be accomplished.

*4. Teachers

The effort of each teacher to maintain quiet during the tests will aid the program greatly. Teachers could be invited to take the tests with their pupils if they desire. The teacher should avoid saying or doing anything that will cause the child to become excited or frightened about the hearing test. To the child the test should be an interesting game. Therefore, in grades one, two, and three, the test should be referred to as a "listening or hearing game." Teachers, or a designated representative, should be responsible for the discipline of children waiting to take the test.

*5. Recess

A ten-minute recess period for all grades at the same time might be scheduled in the morning and again in the afternoon to eliminate long periods of disturbing noise.

*6. Early Dismissals

Kindergarten and first grade pupils (and others who leave school early) should be dismissed as quietly as possible. Ask the children to leave the school ground and immediate vicinity as quickly and as quietly as possible

*7. Custodian

Informing the custodian in advance of the hearing tests will make it possible for him to adjust his work accordingly

*8. Faculty Meeting

It is important that all teachers understand something about the hearing tests administered in the school and the reason for these tests. It is advisable to call the teachers together for a short informative talk about the program, about procedures, and an explanation of how to complete any required forms

9. Helpers

"Helpers" may be used for the screening portion of the program. The principal may wish to ask two mothers or two members of the PTA to assist with the screening. Responsible students of the upper grades may also be used. It is not advisable to use different helpers throughout the day. The helpers assist in monitoring children, posting records, etc.

NOTE: Items marked with an asterisk (*) are particularly essential at the time of pure tone threshold audiometric evaluations.

SPEECH, VOICE, AND LANGUAGE DISORDERS

A speech handicapped pupil is one with a disorder of communication. It is present when a pupil has a deviation in speech, voice, or language to the degree that it makes a difference; it interferes with self-expression, or ability to comprehend speech, or causes the individual to become maladjusted to his environment. Speech deviations which do not fit one or more of these criteria are not considered to be of a handicapping nature but rather may be of a developmental nature or an expression of individuality.

Speech disorders are frequently classified as stuttering, voice disorders, language disorders (such as dysphasia), articulatory problems. Stuttering or non fluency may be characterized by the following:

1. long silent blocks where the word does not come out
2. repetitive blocks where the child may repeat sounds, syllables or whole words
3. tension and/or extraneous movements such as eye blinking and jerking of parts of the body
4. personality problems caused by concern over not being able to speak well

Voice disorders are manifested in deviations of pitch which may be too high, or too low, or lack variation, quality having a harsh or hoarse or breathy voice and volume where the child may be talking too loud or soft. Most school age voice problems are caused by vocal abuse and result in vocal nodules. Other voice problems can be caused by allergies, damage to the vocal folds and other organic causes.

Language disorders are characterized in both the receptive and expressive areas. In the expressive area the child is unable to communicate his wants and needs. He may have delayed language development or has not become familiar with the rules of the language so that he can put words together into meaningful sentences. A child with a receptive language problem is not able to receive the information he hears correctly so that he can express himself adequately.

Articulation problems are the most prevalent disorders found in the public schools. There are commonly four types of articulation disorders found.

- | | |
|-----------------------|--|
| 1. sound substitution | child says "wabbit" for "rabbit"
"tat" for "cat"
"thun" for "sun" (sometimes called lisping) |
| 2. omissions | child says "tay" for "stay"
"how" for "house"
"baset" for "basket" |
| 3. additions | child says "stee" for "see"
"tship" for "ship" |

4. distortions

a sound is made incorrectly due to improper placement of the speech mechanism as in a lateral lisp in which the /s/ sound is distorted by having air emitted over the sides of the tongue rather than over the middle of the tongue.

Children having cerebral palsy, cleft palate, hearing loss, mental retardation or other organic problems may manifest one or more of the above.

Pupils are found by speech adequacy screening techniques and by referral from family, teachers, administrators, nurses, physicians, counselors or other professionals. A diagnosis is made by a speech clinician or speech pathologist based upon professionally reliable tests or evaluative techniques or articulation, hearing acuity, language, voice, fluency, prosody, the peripheral speech mechanism and other facets of communication. Referral for additional evaluation to a speech clinic, a physician or other professional resources may be necessary.

Clinical Speech Services include:

1. Identification services (provided to a general school population) consist of locating pupils with handicapping disorders of speech.
2. Remediation services (provided to speech handicapped pupils) consist of service appropriate to the disorder. Service consists of: periodic diagnostic evaluations; direct and indirect remediation activities through manipulations within the environment; conferences and counseling with parents, guardians, siblings, peers, teachers, administrators and other specialists providing complimentary services to the pupil.
3. Referral services (provided to speech handicapped pupils) consist of referring speech handicapped pupils to professionally competent specialists or agencies when a pupil's problem indicates need for further evaluation or service either within or outside the school.
4. Resource (consultative) services (provided to parents and specialists involved in education of and service to pupils) consist of cooperative and coordinated participation in staffings for differential diagnosis and program planning for pupils and making available specialized knowledge pertinent to speech and language development and improvement. Assistance is available for guidance in speech development and improvement programs within the curricula structure of the schools.

5. Administrative services (provided to speech handicapped pupils and administrators) consist of careful planning and organization of the total clinical speech program to assure a comprehensive and continuous service. Scheduling of services, record keeping, case studies, and reporting are among the necessary activities in which a speech clinician must engage to assure effective and efficient operation of a program and service to pupils.
6. Research services (provided to speech handicapped pupils and professional colleagues) consist of analytic evaluations of needs, services, and programs and cooperation in studies pertinent to communication disorders which are conducted by others.

Because of the individual needs of speech handicapped pupils, only a competent speech clinician familiar with a pupil's problem can determine the appropriate service required and the length and frequency of remediation, if such is indicated.

Nurse's Role

Many children with a speech, voice or language disorder may require a medical evaluation. Frequently the required medical examination is more than the routine physical examination, and may require specific examinations of the speech apparatus which may include a neurological, laryngeal and/or a otological examination. Depending upon local school policies, the speech clinician may make a direct referral to the physician. Regardless of the local procedure, the most important factor is that the child obtain the appropriate medical evaluation required and medical treatment if warranted. The nurse performs a most important function in expediting the referral process and in obtaining a copy of the physician's findings which are important in designing an appropriate program for the child. A coordinated and cooperative effort on the part of the speech clinician, nurse, and physician are imperative to adequately serve the child with a speech, voice or language disorder.

Information Guide
Nurse-Family Conferences
Speech and Hearing Referrals

Name	Interview date
Birthdate	Referred by
Religion	Reason
Family Structure	Hearing Test

Prenatal-birth history

Developmental history

Social-Emotional development

Health history

1. child
2. family

Environmental factors

1. past
2. present

Language development

1. voice quality
2. word usage (number-variety)

Nurse Observations

Plan

- 1.
- 2.
- 3.
- 4.

IMMUNIZATION STATUS OF PUPILS

Early immunization against communicable diseases is stressed in medical practices. Ideally the child entering school has been immunized in infancy against diphtheria, pertussis, tetanus, polio, rubella, rubeola, occasionally typhoid and vaccinated against small pox with boosters given against diphtheria, pertussis, tetanus and polio just before kindergarten entry. Although earlier immunizations are preferred, many children start this program as preparation for kindergarten enrollment.

Information about the present immunization status of each child should be gathered when he enters the school system. Parents should provide the medical and health history for each child.

School health personnel should establish the level of immunization for the school pupils and develop a program suited to the specific condition. In development of this program, consideration must be given to the facilities (private physicians and clinics) available, county medical and osteopathic societies, current medical immunization practices in the community, available resources (money and immunization clinics), religious groups which object to these procedures, incidence of the disease in the area, and potential for outbreak of each disease.

The criteria used for assessing the status is the Recommended Immunization Schedule for Iowa published by the State Department of Health.

In schools where a large percentage of the pupils are not adequately immunized, modification of the present program is essential.

Once the immunization level of the pupils has been established, a program to meet the identified need must be developed in conjunction with community resources. Families may need help in understanding that the health care of the children is the family's responsibility. Often parents also need assistance in identifying and using the available community resources.

Immunization clinics sponsored in schools, do meet the present need of the immunized child. However, they do not promote health care as a family responsibility or educate parents in utilization of community resources for health care. Also, the school program usually misses the preschool child who is more vulnerable to complications of these childhood diseases. School health personnel should promote community based programs in an effort to promote general health care in the entire population.

Immunized children and children who are partially immunized will need to be evaluated on an individual basis. There may be medical or religious reasons which preclude any change in the present situation. For these children who could be immunized, the school nurse can effect the desired change by helping the family to understand the hazards of susceptibility. Also, the family may have to cope with problems of higher priority before they can attend to this matter.

The immunization level of children in the primary grades may be relatively high but this level is not maintained. High school pupils are often found to have had no boosters since their original immunizations.

The frequency of boosters and ideal age of immunization are under the direction of the medical practice and recommendations of the State Department of Health. These recommendations are subject to change as knowledge increases.

RECOMMENDED IMMUNIZATION SCHEDULE FOR IOWA

The following is a compromise of the recommendations of the American Academy of Pediatrics and the Public Health Service Advisory Committee on Immunization Practices.

A. CHILDREN, 0-18 years of age.

Immunizing Biological	Best Age To Begin	Number of Doses	Boosters
DIPHTHERIA & TETANUS TOXOIDS, PERTUSSIS VACCINE (DTP)	2 months	3 injections 1 month apart.	1 year later and again at 3 years of age. Subsequent boosters of Diphtheria-Tetanus (Adult type) at ages 6 & 12.
TETANUS & DIPHTHERIA TOXOIDS, COMBINED (For Adult Use) (TD)	6 years and over if not previously immunized	2 injections 4 to 6 weeks apart.	1 year later, then at 10 year intervals or if wounded.
MEASLES VACCINE, LIVE VIRUS	12 months	ATTENUATED (may or may not be accompanied by modifying gamma globulin) -- 1 injection OR FURTHER ATTENUATED (No gamma globulin) -- 1 injection.	Not presently considered necessary.
MUMPS VIRUS VACCINE, LIVE	12 months	1 injection	Not presently considered necessary.
POLIOVIRUS VACCINE, LIVE ORAL (SABIN)	2 Months	TRIVALENT: Primary immunization of infants less than 1 year -- 3 oral doses 8 weeks apart OR MONOVALENT: 3 oral doses 6 to 8 weeks apart	1 dose of Trivalent at about 1 year later and again before entrance to school. No further boosters presently considered necessary.
	1 year and above	Preschool, school and adult -- 2 oral doses of TRIVALENT 8 weeks apart OR 3 oral doses of MONOVALENT 6 to 8 weeks apart.	
RUBELLA VACCINE LIVE VIRUS	12 months	1 injection	Unknown at present.
SMALLPOX VACCINE	Between 1st & 2nd birthday	1 vaccination -- vaccinate with extra caution during hot summer months.	Revaccination at entry into school and at 10 year intervals. Medical personnel at 3 year intervals.

WE CANNOT SUGGEST TOO STRONGLY THAT ALL PEOPLE KEEP A PERMANENT RECORD OF THE TYPES AND THE DATES OF ALL IMMUNIZATIONS WHICH THEY HAVE RECEIVED

B. ADULTS:

SMALLPOX - Vaccination every ten years or upon exposure. To meet U. S. international travel requirement, vaccination or revaccination must have been received within three years of the date of re-entry into the United States. No vaccination is required for entry into the U. S. from Mexico if no other country has been visited within 14 days of entry. Every vaccination should be observed by the physician at least once to see that it is successful. Initial vaccination should be read on the seventh day and revaccination on about the fifth day. Unsuccessful vaccinations should be repeated, but not until at least two weeks after the first try, lest a superimposition occur. Medical and hospital personnel, morticians and others likely to be exposed to smallpox introduced into the U. S. should be revaccinated at three year intervals.

TETANUS - The original series is two 0.5 cc injections, intramuscularly, at four to eight week intervals, followed by a third dose about a year after the second. To maintain protection, boosters should be given at ten-year intervals. A booster injection of 0.5 cc should be given promptly after any injury or before surgical work on old wounds. If wounding occurs within one year of booster, another booster probably is not indicated except under very exceptional circumstances. Begin new ten-year booster interval from date of any booster.

DIPHTHERIA - Use only toxoids labeled for adult use. Tetanus-Diphtheria Toxoids, combined (for adult use) is the agent of choice, administered according to above schedule for tetanus.

TYPHOID - Routine typhoid immunization is NOT recommended in the U. S. Intimate and continuous contact with a typhoid carrier or travel to areas where typhoid is endemic are indications for typhoid vaccination. There are no data to support typhoid vaccine use before attendance at summer camps or in flood situations. The primary series is two 0.5 cc doses given subcutaneously at intervals of four or more weeks. In areas of high typhoid incidence, a booster dose of 0.5 cc may be given every three years. Use of vaccine containing Para-typhoid A and B antigens is NOT recommended.

INFLUENZA - For persons who have not had a vaccine containing recent strain within the preceding two years, two 1 cc injections subcutaneously at a four to eight week interval between doses. Those who have had such vaccine within two years need only one 1 cc injection. Immunizations should be obtained in late September or early October to protect during the usual influenza season. Primary target group is debilitated, aged or infirm persons, particularly those living in institutions.

POLIOMYELITIS - Adults need this immunization only when traveling abroad or should an epidemic occur. Follow the schedule for children.

C. SCOPE OF THESE RECOMMENDATIONS:

The immunizations on this page, front and back, are those recommended for Iowans in Iowa. With few exceptions, such as the need for Rocky Mountain Spotted Fever vaccine for persons whose work may take them to certain areas, these recommendations are adequate for the entire United States. Other immunizations are needed for travel outside of the United States. Information on these may be obtained by requesting our sheet "Immunizations for Overseas Travel".

GROWTH MONITORING

It has long been common practice in Iowa schools to weigh and measure the height of school children at least annually. The measurements have been recorded on the pupils record and often to the parents each time. It is extremely difficult to verify any health problems that have been identified by this procedure. The child who markedly deviates from the norm is readily identifiable without this routine task.

The child who is, or should be, concerned about his growth progress is best helped on an individual basis. Often this will be on a self referral basis among the later elementary and secondary level children. The junior high school children seem to be the group with the greatest variety of size and shape in the peer group. This precipitates anxieties in some children, girls fear they will become giants and boys fear they will be midgets.

Individual counseling should explore eating patterns, exercise and rest, family cultural patterns in relation to food selection and growth. When several children in the school have a common growth problem, they may benefit from group meetings.

Eating patterns are well established and change in the weight of the child is highly dependent upon altering these patterns in both the amount and type of food. This is a long term program. Anyone attempting to alter eating patterns needs support over a lengthy period of time until the new pattern is firmly established.

DENTAL HEALTH ASSESSMENT

Over 90% of children of school age suffer from tooth decay. In addition, almost 50% have some evidence of gum disease and about 1/3 have problems of oral growth and development serious enough to require treatment by specialists. There is little doubt that children's general health, behavior, personal appearance and progress in school are seriously affected by these conditions. It is of utmost importance that each child receive an oral examination and evaluation each year. Directors of public health dental programs generally agree it is preferable for the children to go to the dental office for such examinations unless the school has a fully equipped dental office and employs a school dentist. No school system in Iowa meets these qualifications. Only in the dental office does the dentist have access to the proper equipment, instruments and facilities for a thorough oral examination. Since more than 90% of the children will require some dental treatment each year, it is not economical use of dental manpower to have children examined in school in order to determine whether a child needs dental care. Furthermore, even if a child's mouth has been previously examined in school, it must be re-examined when he visits the dental office. Examinations in the dental office, therefore, save time for both the child and the dentist. Also, the child's visit to the dental office is a learning process and helps establish the annual office examination as part of his personal health program.

It is generally inadvisable to have nurses or teachers examine children's mouths. They are not trained or equipped to find any but the very large defects and may overlook some hidden defects and other evidences of dental disease which would be detected by the dentist. Failure to have small defects discovered and pointed out may give the child and the parents a false sense of security about the child's oral health. Even though these examinations are designated as "dental inspections" or "dental screening" they risk being misunderstood and interpreted by many pupils and parents as dental examinations.

Dental referral cards are available from the Bureau of Dental Health Education, Dental Building, Iowa City, Iowa 52240. It is recommended these dental cards be used to remind the child and parents that regular dental supervision is necessary and that the child's oral health should be evaluated at least annually. It is suggested the dental cards be distributed at intervals during the school year so that all children do not try to obtain dental appointments at the same time. A parent should accompany the child to the dentist's office. The dental cards should not be returned until signed by the dentist indicating that the necessary oral care has been completed. The nurse should maintain a record of the number of dental cards returned should be maintained and a report submitted to the Bureau of Dental Health Education at the close of the school year.

The Bureau will call for this report in May each year. A sample copy of the reporting form may be found on page 50. Sample copies of the elementary school dental cards (yellow) and high school dental cards (blue) may be found on page 49. These may be ordered from the Bureau at 40¢ per 100 plus postage.

Dental excuse forms are also available from the Bureau. Since the dental needs of children far exceed available time for treatment outside school hours the Iowa State Department of Health and the Iowa Dental Association recommend that children be excused from school for dental care. The Iowa State Department of Public Instruction urges every school district to give the dental excuse plan serious consideration. A copy of this excuse form may be found on page 49. It may be ordered from the Bureau for 75¢ per packet of 100 plus postage.

The use of contests and prizes to emphasize dental card returns is discouraged. This represents a system in which individual pupils receive public recognition or approval for obtaining needed dental care, and it tends to detract from the health education process. Children should be trained to regard regular visits to the family dentist as matter of factly as they regard attendance at school. Furthermore, in most communities there will be a few families who, for various reasons, will not comply with the school's request to take the children to a dentist. It may then be embarrassing to the children if they are publicly penalized by being excluded from some activity because of their parents' failure to obtain needed dental care for them.

SUGGESTED LETTER TO PARENTS OF CHILDREN WHO SHOULD RECEIVE
PROMPT DENTAL EXAMINATION AND TREATMENT

Dear Parent:

As a result of _____ (routine screening;
accidental injury; toothache or other evidence of dental disease)
it is recommended _____ (child's name) receive
a dental examination and necessary treatment as soon as possible.

Because we know how important your child's dental health
is to his total health and future well-being, we strongly urge
that you schedule an appointment with your family dentist at
the earliest opportunity.

Nurse _____
Principal _____

Please take this with you to the dentist so he may supply
any information necessary to keep our health record current.

REMARKS:

Dentist _____
Parent _____

SCHOOL EXCUSE FOR DENTAL APPOINTMENT

..... has an appointment
 (Name of Pupil)
 for necessary care on at
 A.M.
 P.M.
 This care cannot be satisfactorily rendered outside of school hours. Therefore, it will be
 appreciated if this pupil be permitted to keep the appointment as indicated above.

.....
 (Signature of School Principal) ☆ ☆ ☆
 (Signature of Parent)
 was in my office from
 A.M.
 P.M.

to 19 for dental care
 A.M.
 P.M. on
 (Name of Pupil)
 (To be returned to the School Principal) (Signature of Dentist)

The Iowa State Department of Health and the Iowa Dental Association
 recommend that your school cooperate in this dental excuse plan making it
 possible for the children in your school to obtain necessary dental care. The
 Iowa State Department of Public Instruction urges each local school district
 to give the dental excuse plan serious consideration.
 A permit from school for such purpose, used judiciously, will enable school
 children to secure necessary dental care which cannot be satisfactorily ren-
 dered during the hours when school is not in session.

Plate #1059 Rev. 66

HIGH SCHOOL DENTAL CARD Bureau of Dental Health Education The University of Iowa and Iowa State Department of Health

Student's
 Name School
 Town Grade Date

To High School Students:
 Good health, good looks, and a pleasing personality are important to every young person.
 All of these can be jeopardized by dental and oral disease. Unhealthy teeth, gums, and
 surrounding tissues are no asset to anyone, and often adversely affect one's personality,
 appearance, and general well-being. Only by consulting your dentist can you be sure of
 the present state of your oral health. You are therefore urged to take this card to your
 family dentist, as soon as possible, for a complete oral examination and necessary care,
 if indicated. When the dentist has signed this card, please return it to the school.

To the Dentist:
 I have examined the mouth of the above student and have completed all necessary care.
 Doctor: PLEASE DO NOT SIGN CARD UNLESS NECESSARY CARE IS ACTUALLY
 COMPLETED.
 Date D.D.S.
 Plate Z1053 Rev. '67

DENTAL CARD

Bureau of Dental Health Education, The University of Iowa, and
Iowa State Department of Health

Student's
Name

School

Town

Grade

Date

To the Parent or Guardian:

Three kinds of care are necessary to protect your child's oral health. These are: adequate nutrition, proper toothbrushing, and regular supervision by the dentist. The school and your family dentist may assist you in this responsibility if you will take your child and this card to your family dentist for an examination and an explanation of oral needs. Our objective is the promotion of better general health through complete oral care. Unnecessary loss of teeth and many future oral problems can be prevented.

THIS CARD SHOULD BE SIGNED BY THE DENTIST AND RETURNED TO THE TEACHER BY YOUR CHILD.

(Study Oral Health Guide on other side.)

To the Dentist:

I have examined the mouth of the above child, and have completed all necessary care.

(Doctor: PLEASE DO NOT SIGN CARD UNLESS NECESSARY CARE IS ACTUALLY COMPLETED.)

Date

Dentist
(Over)

ORAL HEALTH GUIDE

Good oral health depends on:

1. Nutrition—the following should be included each day to insure an adequate and balanced diet: 1 serving of leafy, green or yellow vegetables; 1 serving of citrus fruit or tomatoes or raw cabbage; 2 servings of other vegetables and fruits; 1 quart of Vitamin D milk; 1 serving of meat, liver, poultry or fish; 1 egg; 2 servings of bread or cereal and 6 teaspoons of butter or fortified margarine. Concentrated sweets such as candies, sugars, soft drinks or a high carbohydrate intake offer opportunity for acid-forming bacteria to grow. The acid thus formed is the actual agent of destruction which dissolves the tooth substance to produce dental caries. High carbohydrate intake results in a decrease in appetite for a balanced diet. Carefully watch between meal eating and always restrict it to non-sugar foods.
2. Proper toothbrushing—teeth should be brushed thoroughly three times a day, preferably immediately after meals. Children need adult supervision.
3. Oral supervision—visits to the dental office for examination and prophylaxis should be made every four to six months unless otherwise specified by the dentist.
4. Topical (local) application of fluorides to the teeth by the dentist or hygienist.
5. Fluoridation of the city water supply, if needed.

Rev. '64

General Health Assessment

Reviewing the child's medical and health history with the family and recording pertinent information is the beginning of the school health record which should be maintained throughout the child's school years.

Information which has implications for the child's educational program should be recorded and implications for the modification of the educational program should be discussed with the child, his family, his physician and teachers. Personal specific information should be limited to that which has implications for the educational program.

The school record can more correctly be described as a health record rather than a medical record.

The school may need to provide for educational assistance beyond the regular classroom experience for the child with health problems. The school nurse is in a position to serve as liaison, between the medical professional, the family and school personnel interpreting the procedures; hoped for outcomes for specific children. With her freedom to move out of the school setting into the community and family homes, the school nurse has the opportunity to secure pertinent information which will assist everyone in making the child's school experiences more beneficial and rewarding to the child and his family.

In surveying the health records of the pupils, the nurse is able to identify existing health problems and potential problems which are the basis for developing a relevant health program.

General Health Assessment Records

When each child enters school, reviewing the child's medical and health history with the child and his family for pertinent information to be recorded, is the beginning of a school health record which should be currently maintained throughout the child's school years.

Information which has implications for the child's educational program should be elicited and expected modifications of the child's educational program should be discussed with the child, his family, his physician and his teachers. Personal specific information in this record should be limited to that which has implications for the child and his educational program. This school record can more correctly be described as a health record rather than a medical record.

The health status of each pupil must be shared with school personnel involved with the child if this is to be useful information. Often just a diagnosis (statement of condition) does not provide the school personnel with adequate information. The school nurse,

knowledgeable in medical and health care and familiar with the educational structure, can assist the child's teachers in understanding the educational implications of a diagnosis.

The specific health record form to be used can be decided by the local school districts. A suggested form on page 53 is included in this publication. These suggested forms have been made with a standard typewriter and can be modified and duplicated locally. For those schools wishing to purchase forms, most commercial firms selling school record forms include a health record in their stock.

NEW PUPILS

HEALTH INFORMATION FROM PARENTS

Name of Child _____ Grade _____ School _____

Name and Address of Parent or Guardian _____ Phone _____

Date of Child's Birth _____ Sex _____ Color _____ In making our survey
of school children
Physician usually employed _____ it is necessary for us
to secure information
City _____ from the parents
concerning the

In case of emergency, if you cannot be reached, who shall
be called? history of the
Name _____ children. May we
ask your cooperation
Address _____ in furnishing the
Phone _____ needed information?

Has this person agreed to assume this responsibility? Yes _____ No _____

Parent or Guardian: Please give age in years when child had the following:

Measles _____ Mumps _____ Smallpox _____ Pneumonia _____
Whooping Cough _____ Scarlet fever _____ Poliomyelitis _____
Rheumatic fever _____ Chickenpox _____ Diphtheria _____
German measles _____ Operations (kind) _____
Date _____ Has child been exposed to tuberculosis _____
By whom? _____ Infectious hepatitis? _____

Please give age in years when child completed series of treatments:

	First	Second	Third	Booster
Diphtheria				
Whooping Cough				
Tetanus				
Smallpox				
Measles				
Rubella				
Poliomyelitis				
Tuberculin Test				
Chest X-Ray				
Other				

Notes:

EVERY PUPIL EVERY FALL

SUPPLEMENTARY SCHOOL HEALTH REPORT

To Parents or Guardians:

In order to bring the individual school health record to date, this form should be filled out promptly and returned to the teacher.

NAME OF CHILD _____ AGE _____

NAME OF SCHOOL _____

REPORT FOR SUMMER AND PAST SCHOOL YEAR

Did your child have an illness or accident? _____ If so, please
state type _____

Operation (kind) _____

Injury _____

Immunizations (kind) _____ Boosters _____

New glasses or lenses: _____ Did your child visit dentist _____

Name of Dentist _____

Name of Doctor _____

In case of an emergency, if you cannot be reached, who shall be called?

Name _____ Telephone Number _____

Address _____

Has this person agreed to assume this responsibility in case of an
emergency? Yes _____ No _____

Doctor _____ to be called at parents' expense in case
of emergency. If it should become necessary, take child to the

_____ at the parents' expense.
(Hospital)

Date _____ Signature of Parent _____

SCHOOL NURSE FAMILY RECORDS

Most school children have only short term illnesses and do not require extensive health records. Some children and their families require more and continuous nursing services to assist the child in making progress in school. For these children a more complete record of health problems, nursing care plans, progress and evaluations, needs to be kept by the school nurse.

These records are considered confidential nursing service records, are kept locked and are not a part of the child's permanent school record. The nursing service record may well contain confidential information about the family and their problems, their interpersonal relationships and resources relevant to a current situation. This confidential information would not be relevant to the child's educational program although necessary to providing effective nursing services.

The following forms are suggested for use by school nurses in maintaining their confidential files. These forms have been prepared by typewriter and can be reproduced locally.

Date opened _____

FAMILY RECORD

H. of H.--Last Name First Middle Color Nationality Religion

Wife--Maiden Name First Middle Color Nationality Religion

P.O. Address Township Telephone Residence County

Directions for reaching home

Family Physician Case Referred by
(List all members of family whether living at home or away from home).

NAME	Birth Date	Sex	SM WD	Rel. to H.H.	Occupation or School Dist.	Specific Health Problems
1. H. of H.						
2. Wife						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

* If person dies, give date and cause.

ENVIRONMENTAL HEALTH DATA:

SUMMARY OF IMPORTANT SOCIAL FACTORS

Heating	
Screening	
Water Supply	
Excreta Disposal	

FAMILY RECORD CONTINUATION SHEET

[illegible]

PUPIL HEALTH RECORD

Pupil Number	Name	Address		M ☐ F ☐	Birthdate
Last		First	Middle		
Name of Parent of Guardian		Address		Family Doctor	Address
Medicine Taken Regularly		Defects or Conditions that would have an effect on school performance			

DISEASE AND IMMUNIZATION HISTORY

Diseases	Date	Diseases	Date	Immunizations	Original	Booster	Booster	Tests	Date	Pos Ne
Allergies		Rheumatic Fever		Diphtheria				TB Tests		
Chickenpox		Scarlet Fever		Poliomyelitis				Mantoux		
Diphtheria		Smallpox		Smallpox				Other		
German Measles (Rubella)		Whooping Cough		Tetanus						
Hepatitis		Operations and Injuries		Rubella				X-Ray Sm. Lge		
Measles (Rubeola)				Whooping Cough				X-Ray		
Mumps				Rubeola				X-Ray		
Pneumonia				Mumps						
Poliomyelitis										

PHYSICAL EXAMINATION

	Date	Date	Date	Date	Date
General Appearance					
Posture					
Nutrition					
Skin					
Feet					
Nose and Throat					
Eyes and Ears					
Tonsils and Glands					
Heart and Lungs					
Abdomen					
Name of Examining Physician:					

DENTAL EXAMINATION	
Date	
Condition of Teeth and Gums	
Name of Dentist	

68

SCHOOL HEALTH SERVICES PROGRAM

School health service programs must be established to meet the health needs of the school population if these services are to make a difference. As the assessments are completed the program is developed to alter, improve or maintain the present condition.

The school nurse will have a leadership role in establishing the school health services program. The school faculty and administration must be involved in the general planning for establishing scope, priorities, procedures and scheduling specific activities. Many of the health assessment procedures will affect the classroom. Teachers and nurses need to plan cooperatively in scheduling these activities.

Priority should be given to the assessment procedures on the basis of the educational impact of specific health problems for a child and the potential for involving more children in this problem. Also the availability of essential personnel will have some control of the timing of the assessment.

The effectiveness and comprehensiveness of the school health program is highly dependent upon available community resources. Health needs of the school child generally may be assessed in the school but a community concern with these needs must be created before the community is likely to provide resources for coping with these needs. In some areas, it may not be possible to provide particular resources locally. In this situation, local community organizations may be interested in providing means of transportation for children to resources in the area. Local school health services will need to accommodate these factors when planning the health services program.

When assessment procedures reveal a major or potential health problem, the existing health service program needs to be carefully evaluated for effectiveness. As an example, when the immunization status of the entering kindergarten children is relatively low, the existing program for preparing children for school needs to be carefully evaluated in relation to several factors.

The availability and accessibility of resources for immunization of children during the pre-school years; the patterns of health care in the community, the parents understanding of the hazards of susceptibility, and the school's method of presenting the information to the parents should be studied to find which phase must be modified before the immunization of children is likely to be increased.

Screening programs in health assessment done early in the school year identify those children with potential problems. This allows the classroom teacher to accommodate the situation as much as possible pending remediation. The teacher, aware of specific problems can lower the frustrations of the child, making his classroom experiences more satisfying for him.

Where there are limited resources available for referral, an increase in the screening activities will seldom improve the remediations needed. The school nurse may find better returns for her efforts if her time is spent helping the community develop accessibility to resources. In less populated areas this may mean the development of transportation and financial resources to get children to the professional evaluation locations.

COMMUNICABLE DISEASE CONTROL

School nurses, classroom teachers and parents must work together to control communicable disease effectively in schools. School personnel are in a strategic position to aid in this control.

Teachers by continuous daily observation, are alert to those deviations from the child's normal appearance or behavior that may indicate the onset of disease. The school nurse, will be able to help teachers feel secure in their observation of the pupils. Whenever an increased incidence of any communicable disease is expected the nurse should provide the teachers with early signs and symptoms, how long the child is required to be out of school, and any specific procedures to be carried out upon return.

For many communicable diseases common among school children, the respiratory tract is the portal of entry and reflects the body's first reaction to the disease. However, every "running nose or scratchy throat" does not develop into one of the communicable diseases. Teachers who detect deviation from normal in any of their pupils should report this to the principal and school nurse. At any time a child appears to have signs or symptoms of illness, the principal is acting properly to exclude the child from school pending diagnosis by a physician. Although many people are able to readily recognize departures from normal health, the diagnosing remains the legal domain of the physician. Therefore, referral to the child's physician is the proper course of action whenever there is doubt about the child's state of health.

The Preventive Medicine Services, Iowa State Department of Health, published a Communicable Disease Chart which is available in quantity for schools. This chart contains this information about communicable diseases: disease, usual interval between exposure and first symptoms of the disease (incubation period), the main symptoms and the minimum length of exclusion from school. The chart is frequently up-dated so it is essential that all previous charts be destroyed when a new one is published. Each fall, when the new school year starts, the school nurse should make sure everyone has a current chart.

Many parents recognize childhood diseases such as chickenpox, mumps, measles and will notify the school when these occur in the family. Although only physicians are legally permitted to diagnose, the practice in Iowa has been to accept the parents statement that the child has one of the usual childhood diseases. As immunization programs become more effective parents may not see children with these diseases and become much less astute in their recognition.

When a child is reported to be ill with a communicable disease a home visit by the school nurse may be very helpful to the family. At this time the nurse can review with the mother, the usual progress of the disease, nursing care measures to make the child more comfortable, spread of the disease in the family, and length of required exclusion from school. Also the implications of virus infections for the mother in very early stages of pregnancy should be discussed. Parents can be helped in observing other children in the family who may be developing early symptoms and keep these children home from school.

School administrators must be informed early when an unusual number of cases of a disease are noted. Parents may be informed when their children may have been exposed to infectious individuals. Generally, before parents are notified, the children would have been in close prolonged contact with the infectious persons. Merely being in the same school building, eating in the same cafeteria, or playing on the same school ground does not usually constitute exposure. Unjustified notification of the parents can lead to community chaos--with physicians being besieged for unwarranted prophylaxis that they do not have readily available.

The weekly reports of communicable disease (including food poisoning) to the local health officer or regional health office sent by school health personnel are forwarded to the State Department of Health, The Preventive Medicine Services Division. This information is used in compiling the Morbidity Report for the State of Iowa, and Health Department Planning. The Communicable Disease Report forms are available from the Regional Health Office Supervising Nurses.

In reporting incidence of "flu" type of illness it is helpful to the Division of Preventive Medicine if the Report gives some of the symptoms of the illness.

Nausea, vomiting, diarrhea, aching, painful joints, cough, sore throat, elevation of temperature, upper respiratory disease symptoms, number of children in school building and number of children having the same symptoms are helpful data to be included in the report. The Preventive Medicine can often then distinguish between "flu" and influenza incidence in the state.

When there is concern about a disease outbreak in schools, or an unusual number of cases appear, the State Department of Health, Division of Preventive Medicine Services may be called collect.

In planning community immunization clinics, resources of the State Department of Health Immunization Section are available in areas of promotional aides, and list of biologicals for such programs. This assistance may be requested through the Regional Health Office Supervising Nurses.

SCHOOL NURSES ROLE IN COMMUNICABLE DISEASE CONTROL PROGRAMS

The school nurse as a member of the community health care team will carry a major responsibility in the following areas:

1. Encouraging parents to have their children fully immunized. The preferred recommendation is to have families go to their own physician for the immunizations.
2. Assessment of the immunization status of the school population and all new students entering the school.
3. To inform school administration and local health officers periodically of the findings of the assessment.
4. To carry the major responsibility for coordinating school programs with community immunization clinics.
5. To keep the school administration and appropriate health personnel informed of any outbreak of disease among the school population.
6. To establish with the school administration, Medical and Osteopathic Societies and the local health officer written policies within the limits of State Health Department Regulation relating to school attendance of children who are in the infectious stages of communicable disease.
7. Assist parents in developing the ability to recognize signs and symptoms of illness in their children so they may keep sick children out of school.
8. Assist teachers in recognizing signs and symptoms of illness among their pupils.
9. Weekly reporting of communicable disease incidence including "no disease to report."

A NOTE TO PARENTS:

Communicable diseases spread easily in the school environment. Preschool children usually play only with the children of their own neighborhood. When they enter school, however, their associations with other children are greatly increased in number. Contacts are closer and more prolonged. Older children of a family often bring home from school germs or viruses which may infect their brothers and sisters who are too young to go to school.

Parents should know that most of the common diseases of childhood usually begin with innocent-appearing symptoms, quite like those of the common cold. It is only after a few days that the more tell-tale symptoms appear, such as distinctive coughs, rashes or fever. By the time these major symptoms appear, other members of the family may be infected and incubating the disease.

If a disease appears in a family, the parents should notify the school nurse that their child has that specific disease. If this is done, the nurse and teachers will be on the alert for other cases. Sometimes prompt action of the nurse or teachers will enable the physicians of the school system or community to take preventive action to stop the spread of disease.

Diseases are reported by the school to the State Department of Health. The Department, by watching the "big picture," is often able to prevent much suffering of our children. **Reporting of disease is important. Please do your part to make it complete, timely and useful.**

METHODS OF DISEASE TRANSMISSION:

The childhood diseases are usually spread by direct contact or indirectly via the respiratory or alimentary route.

Direct contact means touching of one person by another, such as walking hand in hand, kissing, or any other instance where skin comes in contact with skin. Direct contact also includes handling of objects, such as pencils, handkerchiefs, apples, papers, or desks freshly contaminated by an infected person. Indirect contact, on the other hand, does not require touching or handling persons or things. The germs are discharged into the air by the infected individual and are breathed in or swallowed by another. The infected person may have left the room or school long before the indirect transmission occurs. Generally, however, the transmission interval is rather brief.

RULES TO PREVENT TRANSMISSION OF DISEASE:

1. Wash hands frequently with soap and water, particularly after toilet and before eating.
2. Cover nose and mouth when sneezing or coughing. Use handkerchief or tissue. Don't spit.
3. Stay Home When Ill. Contact your doctor.

1971

COMMUNICABLE DISEASE CHART

Iowa State Department of Health
DES MOINES, IOWA



ARNOLD M. REEVE, M.D., M.P.H.
COMMISSIONER

PREVENTIVE MEDICAL SERVICE

1971

COMMUNICABLE DISEASE CHART

CONCISE DESCRIPTIONS AND RECOMMENDATIONS FOR EXCLUSION OF CASES FROM SCHOOL

DISEASE *Immunization is available	Usual Interval Between Exposure and First Symptoms of Disease	MAIN SYMPTOMS	Minimum Exclusion From School
CHICKENPOX	13 to 17 days	Mild symptoms and fever. Pocks are "blistery", have scabs, most on covered parts of body.	7 days from onset of pocks.
DIPHTHERIA*	2 to 5 days	Sore throat, grayish membrane in throat. A serious illness.	After 2 negative cultures from nose and throat 24 hrs. apart
GERMAN MEASLES* (Rubella)	14 to 21 days	Usually mild. Enlarged glands in neck and behind ears. Brief red rash.	5 days from onset of rash. Keep away from pregnant women.
IMPETIGO	4 to 10 days	Inflamed sores, with pus.	Until physician permits return.
INFECTIOUS HEPATITIS	Variable - 15 to 50 (average about 25) days	Headache, abdominal pain, nausea, vomiting, usually fever. Skin and eyes may or may not turn yellow.	14 days from onset of clinical disease, and at least 7 days from onset of jaundice.
MEASLES*	10 days to fever 13-15 days to rash	Begins like a cold, fever, blotchy red rash.	7 days from onset of rash.
MENINGO- COCCAL MENINGITIS	2 to 10 (Com- monly 3 to 4 days)	Headache, nausea, pain in back, stiff neck, fever.	Until physician permits return
MUMPS*	12 to 26 (com- monly 18) days	Fever, swelling and tenderness of glands at angle of jaw.	9 days or until swelling disappears
PEDICULOSIS (Lice)	7 days for eggs to hatch	Lice and nits (eggs) in hair.	1 day after DDT or other adequate treatment.
POLIO- MYELITIS*	7 to 12 days	Fever, vomiting, headache, stiff neck, muscle soreness.	7 days from onset.
RINGWORM OF SCALP	10 to 14 days	Scaly patch, usually ring shaped, on scalp.	Until physician permits return.
SCABIES	3 days to 3 weeks	Tiny burrows in skin caused by mites.	Until adequately treated by physician.
SCARLET FEVER SCARLATINA STREP THROAT	1 to 3 days	Sudden onset, vomiting, sore throat, fever, later fine rash (not on face). Rash usual only with first infection.	7 days from onset if untreated or 24 hours after antibiotics.
SMALLPOX*	7 to 16 days	Headache, fever, backache, blister-like outbreak.	Until all scabs are gone
WHOOPIING COUGH*	7 to 10 days	Head cold, slight fever, cough, characteristic whoop after about 2 weeks.	21 days from beginning of whoop.

Readmission to School. It is advisable that school authorities require written permission from the health officer, school physician or attending physician before any pupil is readmitted to class following any disease which requires exclusion, not mere absence, from school.

When the community desires to conduct an immunization program or clinic, they may write to the Immunization Section, Preventive Medical Services, Iowa State Department of Health, Des Moines.

ACTIVE IMMUNIZATION CLINICS

Burlington--Des Moines County
Health Center--522 North Third
Phone--752-4561
1st Thursday of each month-Donations

Bloom field--Davis County
Joanne Bride
Phone--664-1911
Davis County Neighborhood Center
Last Saturday each month 9-11 A.M.
Open to all 2mo.--19yrs.

Cedar Rapids--Linn County
Mercy Hospital
Phone--363-2093

Council Bluffs--Pottawattamie
Dr. Lee Martin Therapy Center
1017 South Main Street
1st Saturday of each month
9:30-12:30
Phone--323-1331

Ottumwa--Wapello County
Ottumwa Hospital--9-11A.M.
Phone 684-4671 Ext. 45
First Tuesday of each month--Fee 50¢

Sioux City--Woodbury County
City Hall
Phone 277-2121

Davenport--Scott County
VNA Building--3rd & Marquette
Phone--324-5274

Des Moines--Polk County
State Armory Building
East 1st & Des Moines Street
Phone--283-2611 Ext. 265
Every Thursday-Donations-Out
of County--50¢.

Iowa City--Johnson County
City Hall--25 S. Van Buren
Phone 377-9686

Muscatine--Muscatine County
City Hall--3rd & Sycamore Street
Phone--263-3325
Every week day

Dubuque--Dubuque County
City Hall
Phone --583-6441 Ext. 61
By appointment to V.N.A.

Clinics are in the process of being set up in Waterloo--BlackHawk County and Centerville--Appanoose County. For further information contact the local Public Health Nurse.

IOWA STATE DEPARTMENT OF HEALTH
POLICY GOVERNING DISTRIBUTION OF IMMUNIZING
BIOLOGICALS, SERA AND ANTIBIOTICS

The Iowa State Department of Health maintains selected immunizing biologicals and certain drugs for distribution in Iowa. These materials are provided as a service to physicians of the state. Distribution is designed to encourage the immunization of children, to control infectious diseases, to provide a source of infrequently used items which local pharmacies may not be able to stock and to provide antibiotics specifically for treatment of venereal disease. Another end of the distribution effort is to encourage reporting of cases of disease which otherwise might escape the Department's notice.

I. DISTRIBUTION:

TO PRIVATE PHYSICIANS:

Most vaccines, without limit as to quantity, are supplied without charge to private physicians for administration in their offices to persons below nineteen years of age.

PUBLIC CLINICS FOR CHILDREN:

Appropriate vaccine, without limit as to quantity, is available without charge to Well Child Conferences, School Programs, Head Start Programs and other clinics which have been approved by the local county medical society or its committee on immunization. Vaccines for clinics are furnished on request of the person in charge of the clinic. When children are immunized in the offices of physicians of their own choice, the physicians should order the vaccine, since the multidose vials provided cannot be broken down by directors of programs for division among several physicians. Clinics receiving these vaccines are requested not to charge the patient for the vaccine, but may charge a fee to cover costs incidental to administration.

PUBLIC CLINICS FOR ADULTS:

Vaccines for these age groups will be supplied on a cost reimbursement basis. Vaccine for county-wide programs may be purchased through the Department.

SHIPMENT OF VACCINE:

Except for gamma globulin, which is not damaged by unrefrigerated shipment, and emergency shipments of rabies vaccine, biologicals will not be dispatched from the State Department of Health between Thursday noon and Monday morning because of delays in transport. NO order will be accepted for less than 100 doses of oral polio vaccine. This product must be shipped packed with dry ice and transportation charges are prohibitive on smaller orders. Large orders for biologicals to be used in school or area programs should be placed at least two weeks in advance in order to permit sufficient time for procurement and proper handling.

II. IMMUNIZING AGENTS AVAILABLE - INFECTIOUS DISEASES:

1. DIPHTHERIA ANTITOXIN: For passive immunization of early clinical cases. Product is a horse serum. Available in vials of 10,000 and 20,000 units. Request amount in accordance to weight of patient.
2. TETANUS AND DIPHTHERIA TOXOIDS COMBINED (aluminum phosphate absorbed) FOR ADULT USE: (Td) Available in 5 cc vials - 10 doses.
3. DIPHTHERIA AND TETANUS TOXOIDS AND PERTUSSIS VACCINE COMBINED (DTP): Available in 7.5 cc vials - 15 doses.
4. MEASLES VIRUS VACCINE:
Available in single dose vials, needle and syringe included. Available in 50 dose vials for community-wide programs with administration by jet injectors.
 - A. - LIVE, ATTENUATED - SCHWARZ STRAIN (Lirugen)
 - B. - LIVE, ATTENUATED - MORE ATTENUATED ENDERS (Attenuvax)

5. POLIOMYELITIS VACCINE (LIVE, ORAL, TRIVALENT)-(SABIN): Available in one dose, ten dose and 100 dose vials. For oral administration.
6. RABIES VACCINE (DUCK EMBRYO): (usually 14 1 cc doses) For active immunization following bite of rabid or suspected rabid animals. May be used for pre-exposure immunization of persons at high risk, e.g. veterinarians, animal handlers, dog catchers, etc.

ANTI-RABIES HYPERIMMUNE SERUM: For use in passive immunization of persons bitten about the face and neck or with bites on other parts of the body within three days after being bitten. It does not replace anti-rabies vaccine but serves as an adjunct in certain situations. Product is a serum of equine origin.

7. RUBELLA VIRUS VACCINE, LIVE:

Available in single dose vials, needles and syringe included.

Available in 50 dose vials for community-wide programs for administration by jet injectors only.

- A. STRAIN -HPV 77 - DUCK EMBRYO (Lyovac Meruvax)
- B. STRAIN-CENDEHILL - RABBIT KIDNEY CELL (Cendevax)
- C. STRAIN-HPV 77 - CANINE RENAL CELL (Rubella Vaccine. Live - Phillips Roxane, Inc.)

8. SMALLPOX VACCINE (DRYVAX): Available in 25 dose vials only.
9. TYPHOID VACCINE: Available in 20 cc vials. For persons in close contact with a known case of typhoid fever or household of a known typhoid carrier.
- NOT FURNISHED FOR WIDE SPREAD USE IN "DISASTER CONDITIONS".

In some circumstances (as in the case of military personnel, missionaries, etc.) biologics for immunization against cholera and/or plague may be obtained from the Department if it cannot be obtained locally by the physician.

III. THERAPEUTIC AND PROPHYLACTIC BIOLOGICALS:

1. GAMMA GLOBULIN: Available in 2 cc vials. For indigent or medical hardship patients who have been closely exposed to known cases of infectious hepatitis, measles or german measles. For patient able to pay, cost reimbursements will be billed to physicians. More detailed policy statement on Gamma Globulin distribution is available upon request.

2. ANTI-TUBERCULOSIS DRUGS: (Supplied upon written request by a private physician).

PRIMARY:

Isoniazid (INH) For anti-tuberculosis therapy
or chemoprophylaxis of positives, recent converters and
other reactors of high risk.

Para-Aminosalicylic Acid (PAS)-For anti-tuberculosis therapy only.

Streptomycin (SM) For anti-tuberculosis therapy only.

SECONDARY:

Ethambutol (Myambutol) - For anti-tuberculosis therapy only.

SUPPLEMENT:

Pyridoxine (Vitamin B₆) - Used in conjunction with INH regimen.

3. ANTIBIOTICS - VENEREAL DISEASE CONTROL:

The following drugs are available without cost to physicians for the treatment of reported cases of venereal disease. Requests for drugs should be made directly to the Division of Venereal Disease Control and must be accompanied by case report.

PROCAINE PENICILLIN, AQUEOUS:

2,400,000 units for male and 4,800,000 units for female gonorrhea cases.
4,800,000 units to 12,000,000 units for syphilis cases, depending upon diagnosis. Aqueous penicillin is the drug of choice in the treatment of gonorrhea.

BENZATHINE PENICILLIN G:

Distribution restricted to syphilis cases - 2,400,000 to 9,000,000 units depending upon diagnosis.

TETRACYCLINE (250 mgm. capsules):

Distribution limited to those medically indigent syphilis and gonorrhea cases in which penicillin sensitivity has been definitely established or in cases known to be due to Penicillin resistant organisms.

IV. EMERGENCIES

1. In the event of an emergency which requires large amounts of any of the biologics, sera or antibiotics routinely supplied or some other biologic not routinely supplied, the Department will assist in acquisition and delivery for any physician in the state. Physicians may obtain assistance by calling:

Weekdays between 8:00 a.m. and 4:30 p.m. - Area Code 515-281-3478

EVENINGS AND HOLIDAYS:

Dr. Stanley Hendricks - Area Code 515-279-4231

or

Mr. Norman L. Pawlewski - Area Code 515-276-6980

or

Mrs. Clara Whetstone - Area Code 515-262-3711.

2. SNAKE ANTI-VENIN: - Polyvalent anticrotalid: Amount according to weight of patient. For treatment of bites of most American snakes. It is of equine origin. It may be obtained direct from the Department on an emergency basis. Enough of this material for one envenomization treatment is also kept at the following Poison Centers:

Iowa Methodist Hospital
Des Moines, Iowa

St. Joseph Hospital
Mason City, Iowa

Bethesda General Hospital
Fort Dodge, Iowa

Dickinson County Memorial Hospital
Spirit Lake, Iowa

3. VACCINIA IMMUNE GLOBULIN (VIG):

The American National Red Cross under contract from the Center for Disease Control in Atlanta, Georgia, distributes this material. Volunteer Red Cross Consultants assist in the distribution. Any Physician who feels that

VIG might be required for a patient should telephone the Commissioner of Public Health, whose name, address and telephone number appear below. If it is agreed that the condition of the patient will benefit from treatment with VIG, the Commissioner will arrange for shipment from the nearest regional blood center. These regional blood centers have twenty-four hour coverage and are equipped to arrange immediate transportation to the attending physician by the most rapid means available. The Department will assist receipt and delivery.

For assistance in obtaining VIG call:

Dr. Arnold M. Reeve
Commissioner of Public Health
Iowa State Department of Health

Between 8:00 a.m. - 4:30 p.m. - Area Code 515-281-5605

After 5:00 p.m. - Area Code 515-276-3501.

Revised July, 1970

MODIFICATION OF STATE DEPARTMENT OF
HEALTH TUBERCULOSIS CONTROL PROGRAM

In recent years much progress has been made in the prevention and control of tuberculosis. The incidence and prevalence of tuberculosis in Iowa at present is at an all time low level.

Methods to prevent the development and transmission of tuberculosis depend upon many factors. Control programs need periodic re-evaluation to make sure the most effective methods are being used.

Mass tuberculin skin testing programs in schools, with x-rays of positive reactors, have been carried on for a number of years. Recently the yield from this program, in terms of cases of tuberculosis found for the state as a whole, has shown a marked decline. While there is some variation from county to county, last year for the entire state less than one-half of one percent of the students tested reacted positively to the tuberculin test. Of these tuberculin positive reactors, not a single case of tuberculosis was found. Of equal importance is the fact that x-raying previously known reactors discovered no cases of tuberculosis. During 1969, 12,778 films were taken by the State Department of Health and the Iowa Tuberculosis and Respiratory Disease Association mobile x-ray units without finding a single case of tuberculosis.

Most cases of tuberculosis in Iowa now develop in persons past middle age and in the advanced years. In the two years, 1968 and 1969, a total of 244 active cases of tuberculosis were reported of whom only six were under fifteen years of age. Five of the six were pre-school age and only one was in the five to fourteen year old school age group. Each of these children had contracted the disease from older relatives and none of them was found by the school testing program.

Since large scale school programs of testing students are no longer considered effective methods of finding cases of tuberculosis for the state as a whole, the statewide program was discontinued. Based on local conditions some individual schools may wish to do tuberculin skin testing on a selective basis.

For officials of a school who, in cooperation with local physicians, wish to do tuberculin testing the following is submitted:

- A. Tuberculin (PPD), needles and syringes may be obtained from the State Department of Health.
- B. Consultation regarding application and reading the test may be obtained from the State Department of Health or from the Iowa Tuberculosis and Respiratory Disease Association. The intradermal (Mantoux) test, using a 5 TU dose of PPD, is recommended because of more accurate control of dosage and consistency and reliability of results. Preciseness in application, reading and recording of the tests is emphasized. Multiple-puncture techniques are recognized as screening procedures. Persons with a positive (5 mm or larger induration) Tine or Mono-Vacc reaction are managed the same as persons who react with 10 mm or more of induration to the standard Mantoux test. Persons with a doubtful (2-4 mm induration) Tine or Mono-Vacc test

should be retested by the Mantoux method with management of the person based on the Mantoux reaction. All reactions to the Heaf or Sterneedle test should be checked by retesting with the standard intradermal test. The jet injection method of delivering 5 TU of PPD intradermally may be considered as a screening test provided a properly trained person is available to operate the jet gun. The Vollmer patch test is not recommended because of its unreliability.

- C. Results of skin testing, including size of reaction in millimeters, should be reported to the State Department of Health on forms provided.
- D. Positive tuberculin reactors should have adequate medical and bacteriological follow-up examinations. This should include at least a chest x-ray. Tuberculin testing without follow-up of reactors is useless. Isoniazid (INH) 300 mgm per day for a year is strongly recommended for all positive tuberculin reactors.
- E. Requirements of the Department of Public Instruction of an annual check for tuberculosis of all school teachers and other school employees should be compulsorily followed whether or not there is a skin testing program for children. For the adult school personnel an annual tuberculin skin test for non-reactors or an annual chest x-ray for all known positive reactors is recommended.

It is recommended that children be tuberculin tested according to the schedule of the American Academy of Pediatrics during routine pediatric follow-up visits to physicians.

Increased efforts now will be directed toward other aspects of the tuberculosis control program. Emphasis will be placed on (1) adequate examination and treatment of known cases with the objective of rendering them non-infectious, (2) adequate testing and examination of persons who have had close contact with known cases, (3) finding sources of infection of new cases, (4) chemoprophylaxis when indicated, and (5) other surveillance activities.

Tuberculin testing with proper follow-up of positive reactors is encouraged among groups likely to have an above average prevalence of infection such as residents of nursing homes, county homes, and penal institutions.

During the years of operation of the mobile units, persons needing periodic chest x-rays visited the mobile unit while it was in the county in connection with the school program. Since the mobile x-ray unit no longer will be available, persons needing periodic chest x-rays should obtain these from the local hospital or physician. In some cities out-patient clinic services are available from State or local Public Health Agencies. In the event the expense is too great for the patient it is suggested that local voluntary or official funds, previously used locally for the mobile unit program might be used for this purpose. Arrangements for such assistance should be made in advance.

This modification of the tuberculosis control program is not to be interpreted as minimizing the importance of tuberculosis. It is still an important communicable disease. This change in methods is intended to utilize the efforts of personnel and funds in the way that will be most effective in attaining the goal of eradication of tuberculosis.

TUBERCULOSIS SURVEILLANCE

The Iowa schools have provided tuberculosis skin testing programs for children in selected grades in cooperation with the Iowa Tuberculosis and Respiratory Disease Association for many years. The supplies and personnel have been provided by the Association with schools providing the space, time and limited personnel.

In recent years the return for this method of case finding of active infectious tuberculosis has dwindled to a point very near nothing. Recent evaluation of the present incidence of tuberculosis in the Iowa population, the source of new cases, implementation of control measures and cost of the school skin testing program have caused the Iowa Tuberculosis and Respiratory Disease Association to conclude they would have a more effective program if the emphasis of case finding activities was directed to the adult population.

Some local and county Tuberculosis and Respiratory Disease Associations have continued to support the skin testing program for the present time. Other local Associations are providing funds for meeting the cost of X-ray for medically indigent persons. Some local associations will follow the same plan the State Association has. There will, for the near future at least, be a variety in programs. Each school district health personnel and school administration will need to meet with the local Tuberculosis and Respiratory Disease Association to plan their program.

The Departmental Rules require an annual tuberculosis report for every employee be on file with the school administration. See section on School Employee Health.

STATE DEPARTMENT OF HEALTH RULES ON COMMUNICABLE DISEASE REPORTING

1.2(139) T.1 Reportable Diseases.

1.2(1) The following diseases or conditions are required to be reported to the Iowa State Department of Health, Lucas State Office Building, Des Moines, Iowa 50319 by the physician or other health practitioner attending any person infected with such disease:

a. Specific diseases:

Anthrax	Leprosy	Rubeola (measles)
Botulism	Leptospirosis	Salmonellosis
Brucellosis	Lymphogranuloma venereum	Schistosomiasis
Chancroid	Malaria	Shigellosis
Chickenpox	Meningitis	Smallpox
Cholera	Mononucleosis, infectious	Staphylococcal food poisoning
Diarrhea, epidemic, of newborn in nurseries	Mumps	Syphilis
Diphtheria	Pertussis (whooping cough)	Tetanus
Encephalitis	Plague	Trachoma
Gonorrhea	Poliomyelitis	Trichinosis
Glanders	Psittacosis	Tuberculosis
Granuloma Inguinale	Rabies	Tularemia
Hepatitis, viral (infectious or serum)	Relapsing fever	Typhoid fever
Histoplasmosis	Rocky Mountain spotted fever	Typhus fever
Influenza	Rubella (German measles)	Yellow fever

b. Any other disease which is unusual in incidence, occurs in unusual numbers or circumstances, or appears to be of public health concern.

1.3(139) T.1 Reporting.

1.3(1) Means of reporting.

a. Telephone, telegraph or other electronic means.

(1) Internationally quarantinable disease. Occurrence of a case of any internationally quarantinable disease shall be reported immediately by telephone, telegraph or other electronic means as soon after the diagnosis as is possible. Internationally quarantinable diseases are cholera, plague, relapsing fever (louse-borne), smallpox and yellow fever.

(2) Disease of high public health importance. Occurrence of a case of typhoid fever or diphtheria will be reported to the Department immediately by telephone, telegraph or other electronic means as soon after the diagnosis as possible.

(3) Occurrence of an outbreak of unusual numbers or under unusual circumstances of a communicable disease, such as epidemic diarrhea of the newborn in nurseries or a food poisoning episode, shall be reported immediately to the Department by telephone, telegraph or other electronic means.

b. By mail or other means. Cases of other reportable diseases shall be reported to the Department by mail at least weekly. If there is concern that delay might hinder the application of organized control measures to protect the public health, incidence of communicable disease should be reported by telephone.

1.4(139) T.1 Forms.

1.4(1) Reports of communicable disease, other than venereal diseases, may be submitted in writing on any paper and in any format.

1.4(2) Venereal diseases should be reported on a special form which is provided to physicians and laboratories. Since these reports are confidential, they shall be transmitted in envelopes or other secure fashion. Reports of venereal disease must include name, age, sex, marital status, occupation of the patient, name of disease, possible source of infection and the duration of the disease. In localities where there is a local, functioning health department, the law requires the report to be made to the local health department. Local health departments must forward the same information to the State Department of Health.

1.5(139) T.1 Who should report.

1.5(1) Physicians are required by law to report all cases of reportable disease attended by them.

1.5(2) Hospitals are encouraged to report cases of reportable disease admitted.

1.5(3) School nurses are encouraged to report cases of communicable disease occurring among the children supervised.

1.5(4) School officials, through the principal or superintendent as appropriate, are encouraged to report when there is no school nurse.

1.5(5) Parents are encouraged to report, particularly when disease occurs in children not in school or when the disease might otherwise not be reported.

1.6(139) T.1 Isolation.

1.6(1) Time periods for isolation and quarantine.

<u>Disease</u>	<u>Period of Isolation</u>	<u>Period of Quarantine</u>
Chickenpox	7 days from onset of pocks.	None
Diphtheria	Until after 2 negative cultures from nose and throat, 24 hours apart.	5 days, if susceptible intimate contact
Rubella (German measles)	5 days from onset of rash. Keep away from pregnant women.	None
Impetigo	Until physician permits return	None
Infectious Hepatitis	14 days from onset of clinical disease, at least 7 days from onset of jaundice.	None
Rubeola (measles)	7 days from onset of rash.	None
Meningococcal Meningitis	Until physician permits return.	None
Mumps	9 days or until swelling disappears.	None
Pediculosis	1 day after DDT or other adequate treatment.	None
Poliomyelitis	7 days from onset.	None
Ringworm of scalp	Until physician permits return.	None
Scabies	Until adequately treated by physician.	None
Scarlet fever	7 days from onset if untreated or 24 hours after antibiotics.	None
Scarlatina		
Strep throat		
Smallpox	Until all scabs are gone.	17 days if unvaccinated and uncooperative
Whooping cough	21 days from beginning of whoop.	None

References

1. Communicable Disease Chart. Concise descriptions and recommendations for exclusions of cases from school. Available in quantity from Iowa State Department of Health, Preventive Medical Service.
2. Control of Communicable Disease in Man. (1970 Ed) Available from American Public Health Association, 1740 Broadway, New York, N.Y., 10019. \$2.00 (all orders under \$5.00 must be prepaid). This publication is updated periodically and should be kept current.
3. Film Catalogue. Available from Iowa State Department of Health. Information and Education Service.
4. Pamphlet Catalogue. Health education material in limited quantity. Available from Iowa State Department of Health. Information and Education Service.
5. List of Biologicals available from Iowa State Department of Health, Preventive Medical Service.
6. Suggested School Health Policies. Fourth Edition. 1966.
Health Appraisal of School Children. Fourth Edition. 1969.
Published and distributed of the National Education Association and American Medical Association. Price 30¢.

National Educational Association	American Medical Association
1201 Sixteenth Street, N.W.	535 North Dearborn Street
Washington, D.C. 20036	Chicago, Illinois 60610
7. Report of Committee on Infectious Diseases. 16 Edition, 1970. Available from American Academy of Pediatrics, P.O. Box 1034, Evanston, Illinois 60204. \$3.00. This report is updated every five years.

TEACHER-NURSE CONFERENCE

To effectively coordinate the health needs of the child and his educational program it is essential that those adults involved with the child plan together, discuss outcomes and coordinate their actions. The teacher-nurse conference, formal or informal, is a two-way exchange of information and may be scheduled periodically throughout the school year.

It is essential for teachers and nurses working with handicapped children to have a conference at the start of the school year to discuss any modifications of the classroom that may be necessary. At this time there should be discussion of limits of the child, behaviors or other signs which should alert the teacher to a potential or actual unfavorable change in the child. Also the discussion should include suggested procedures for controlling or limiting the amount of unfavorable change.

The teacher in her day-to-day contact with the children is often the first person to be aware of change. If the nurse provides the teacher with adequate guidelines the teacher can feel some degree of confidence in coping with the situation. The teacher should be encouraged to keep a record of her observations of children who cause her some concern. These observations can be reviewed and discussed at the periodic teacher-nurse conferences.

When the teacher has children in her classroom who are on drug therapy the school nurse has the responsibility to provide the teacher with the purpose and efficacy of the therapy, expected reactions of the child, duration of the treatment and possible unfavorable reactions with suggestions for coping with them.

For children who might suddenly be in need of special assistance, such as those with diabetes and seizures, more extensive planning may need to be done. The teacher needs to be aware of early signs and symptoms which suggest immediate adult intervention. The plan for intervention will include the actions to be taken for the child and the rest of the children in the class.

Conferences with the classroom teacher need to be planned for a time when the teacher is not likely to be interrupted. The location of the conference should provide some degree of privacy to promote free discussion. The nurse should allow the teacher freedom to express any anxieties felt with potential emergency situations. Teachers may need support in this area. When they understand what is likely to happen and specifically what action to take, where they can expect to get help the anxiety is often alleviated.

The fall conference may need to be followed with periodic conferences throughout the school year for specific children. These conferences provide opportunity for review and discussion of the teachers observations and reporting of any recommendations and reports from the child's physician.

PARENT-NURSE CONFERENCE

The parent-nurse conference is necessary to clarify goals, understand the purpose of actions and report progress that has occurred. These conferences may be held wherever and whenever both parties can converse with the necessary amount of privacy and least chance of interruption for a reasonable period of time. The conference may be held in the school if there is some assurance of privacy. This may be more convenient for the school nurse. It also offers the parent the opportunity to arrange conference times with the other school personnel. Some parents may not be comfortable coming into the school. Some children may not like to have parents come to school for conferences. This is more likely to be the case with adolescents who are struggling to establish their independence.

The parent-nurse conference in the family home allows the parent to be in familiar surroundings and the nurse the opportunity to observe the home environment.

Preparation for this conference with a tentative plan of approach will give the nurse confidence and assure better service through the visits. If there is a previous record, it should be reviewed, contact with school personnel and agencies should be made if they have worked with the child or family. When the nurse has compiled the data she can plan her visit with a more comprehensive understanding of the total situation.

Home visits are usually made on the basis of the child's needs as perceived by the nurse and other school personnel. Most families recognize or feel they have certain needs. This family's recognized needs may vary from the nurse's perception of the family needs, but it can be expected the family recognized needs will be given higher priority. The nurse should recognize she may have different standards for measuring needs and she should attempt to understand family cultural patterns which influence the family need recognition, priority rating and coping mechanisms.

The term "accepting" appears frequently in the counseling literature. It is most important to a satisfactory working relationship for the nurse to be able to accept the family. This means she accepts the human frailty of the family as a fact, a part of life, without passing moral judgment. This does not mean the nurse must be satisfied with the family's standard of living.

The nurse makes a home visit because of a health problem. Asking questions and listening are two counseling skills every nurse has developed. She can encourage parent conversation by the use of "open end" questions that do not suggest or limit the answer. "Tell me about it." "How do you manage?" "How do you feel about this problem?" The nurse should repeat questionable statements, rephrased in her own words so the parent can be sure the nurse understands what the parent is trying to tell her.

During the conference regarding health problems of a child, the nurse may be told of concerns for health of other family members, conflicts of family members among themselves or with society which prevents the family from functioning as a family unit and a part of the community. The school nurse must view the family as a total unit and assist them in coping with their problems even though the focus of these problems is not the school child.

These other health factors in the family include, care of preschool children; assisting the mother in understanding the growth, development and health needs of the child; assisting the mother in recognizing her own health needs as well as those of other family members; helping identify and use the relevant community resources and modifying family living patterns when necessary to achieve the family established health goals. The family may benefit from services provided through other school personnel or other community agencies before they can act effectively in relation to the health problem that precipitated the conference.

Referral to a school social worker or a child welfare worker may be indicated. The nurse has the responsibility to assist the family accepting a referral and to offer assistance in finding the agency of referral. Although these non health needs may take priority the nurse is not relieved of her responsibility for continued follow-up of the health problem. A team approach, including the family, nurse, social worker, teacher, counselor and the child may result in effective changes in both health and social behavior.

The term "team approach" probably most generally describes the school nurses work with every health problem. Few of these problems found among pupils can be handled between pupil and nurse. The smallest team membership would include the nurse, the child and the child's family and the teacher.

THE PRESCHOOL CONFERENCE

The preschool conference program should be considered part of the total school program. The administrator may appoint or suggest school personnel to develop this program. These might include special education personnel, kindergarten teachers, elementary school principal and members from the parents and teachers organizations.

The object of the preschool program is to help the child and his family make a more comfortable transition from the child's limited world of his home to a larger one that includes school. Good physical and mental health, help the child to be successful in this task. The preschool meeting offers an excellent opportunity for parents to identify the school nurse and become acquainted with the purpose and activities of the school health program.

The preschool conference is done in groups or individual parent conferences. When done in groups, the parents have the opportunity to meet parents of the other enrolling kindergarten children, for group instruction can be given for completing information on school entry forms and for providing information about the school. This also allows the nurse to recognize some families who may need help with this transition and to arrange for a home visit with the family. During group conferences, it can be arranged so the school nurse has a short interview with each child's parents and arrange later appointments for those families needing assistance.

The individual parent conference offers the opportunity for the nurse and parent to review and discuss the child's preschool growth and development, immunization status and general health. The nurse also has this opportunity to learn about family cultural patterns relevant to the health care of the child.

During the parent-nurse conference the following areas should be discussed:

1. The child's eating habits. There will not be food snacks available during the school day.
2. The child's ability to dress himself including tying his shoe laces and fastening his outdoor clothing.
3. The child's ability to care for himself in the toilet and knowledge of school vocabulary related to this task.
4. The child's experiences away from the family and out of the family home without family members with him.
5. The child's usual method of coping with new experiences.

6. The childhood diseases and other illnesses he may have experienced.
7. The child's knowledge of his own name and his parents name, address and telephone number.
8. Name of person to be contacted by school in an emergency situation when parents are not immediately available.

Based on the information gathered, the school nurse may have helpful suggestions to make the transition from home to school more comfortable for the child.

During the preschool meeting health information material can be distributed.

The Iowa State Department of Health provides a list of materials related to child health that can be ordered. The small Communicable Disease Chart is helpful for parents to take with them and is available in quantity from Preventive Medicine Services, State Department of Health.

There are a limited number of films available from the State Department of Health relevant to kindergarten entry. Planning for use of these films should be previewed by the nurse and teacher. There should be a preface and follow-up discussion of the film showing led by the school nurse and teacher for the parents to derive the most benefit.

It is highly recommended that children entering kindergarten have a physical examination by the family physician. A written health assessment resulting from this examination should be sent to the school. This pre-enrollment assessment becomes the start of the child's cumulative health record. A health record should be started and maintained for the child throughout his school years. There are suggested forms made by a typewriter which can be reproduced locally on the following pages. For those school districts desiring to purchase records, most commercial school form companies include a health record in their stock of school supplies.

PRESCHOOL HEALTH ASSESSMENT RECORD

Child's Name		Address		Birthdate								
Last	First	Middle	Address		Address							
Name of Parent or Guardian		Address		Family Physician	Address							
M	Medicine Taken Regularly		Conditions which could affect school work									
F												
DISEASES	DATE	DISEASES	DATE	IMMUNIZATIONS	ORIGINAL	BOOSTER	BOOSTER	BOOSTER	Tests	DATE	POS	NEG
Allergies		Rheumatic Fever		Diphtheria					TB Tests			
Chickenpox		Scarlet Fever		Tetanus					Mantoux			
Diphtheria		Smallpox		Whooping Cough					Other			
German Measles (Rubella)		Whooping Cough		Polio. (Sabin Oral)								
Hepatitis				Rubeola					Sm X-Ray			
Measles (Rubeola)		Operations and Injuries		Rubella					Lge X-Ray			
Mumps				Smallpox								
Pneumonia				Mumps								
Poliomyelitis												
PHYSICAL AND DENTAL EXAMINATION												
DATE		Height	Weight	Hearing	Vision							
General Appearance				Right	Left	With Glasses	No Glasses					
Posture						Right	Left	Right	Left			
Nutrition												
Skin												
Feet												
Nose and Throat												
Eyes and Ears												
Tonsils and Glands												
Heart and Lungs												
Abdomen												
DENTAL EXAMINATION												
Condition of Teeth												
Condition of Gums												
Name of Examining Dentist:												

CHILD-NURSE CONFERENCE

Often the school nurse becomes aware of the more complicated health problems when the child initiates the contact on the basis of minor health needs. In dialogue with the child, the school nurse, through interviewing techniques, can provide the child opportunities to comfortably reveal areas of concern about himself. The nurse can assist the child to assess the importance of his concern. The child can be helped to function within the abilities of his developmental stage. The older pupil can often recognize factors which have impact on the situation and select those which can be manipulated to meet his needs.

When working with children in this manner the nurse has a valuable opportunity to help the child function within his own family structure and cultural patterns. This type of nursing service requires the nurse to be knowledgeable about the families of the children she serves. The school nurse can provide support to the child when the child discusses his problem with the parents.

By supporting the action of the child within the family structure and cultural patterns, the nurse assists the child and his family to develop methods of effectively coping with problems and thereby increases the strength of the family unit. Some children may be reluctant to face parents and request the nurse to do this. The nurse must respond to this request on the basis of the child's stage of development and not allow the child to displace his role responsibilities on the nurse. The nurse can offer to accompany the child and at most, to present the child's problem to his parents in the child's presence.

The child in early elementary grades may not be able to understand his true reason for the "headache" or "stomachache" complaints. The nurse who accepts the child's statement as a valid report on how he feels at the present is able to work with the child. The primary child often becomes "ill" under pressure. Recurrence of such illnesses should be investigated for pattern of incidence. Discussion with teachers may identify causal factors such as math, losing in games, reprimands for unacceptable behavior and many others. Another source of "illness" for the young school child is family changes.

In the primary grades it will be necessary for the nurse to contact the family when any problems persist whether the child can recognize the cause or not. It is often helpful to visit with the parents without the child present to provide them with the opportunity to discuss possible plans for meeting the problem and help them with their own anxieties about their child. The development of the child is promoted when he can be part of the planning, within his abilities to understand, this also helps him accept some of the outcomes as necessary although they may not be his preference.

As the child matures, the school nurse has the opportunity to help the child assess the validity of his problem, causal factors and the necessity for involving his parents. The nurse can supply the child with opportunity to explore possible approaches to his family and possible outcomes. The child learns through this experience to solve problems for himself, to explore alternative courses of action before choosing the one he can best manage. As the child grows he strives for independence which can be nurtured within the family structure and cultural patterns.

The high school pupil can more readily assess those situations in which parents have to be involved. The nurse can help the child identify family structure and cultural patterns and establish the degree of independent action these allow the child. This will allow the child to choose a course of action which he believes is reasonable in relation to the family expectations and his own ability. At this age the child may need the support of the nurses' physical presence when he confronts the parents with his problem. If the child has explored possible reactions of the family he can more effectively function in the situation and suggest some courses of action for his parents approval.

In cases where venereal disease is suspected by the child, the State of Iowa allows the child, 16 years of age and older to be treated without parent knowledge. When venereal disease is suspected, the nurse must accept that the child needs help and not be critical of past behavior. These children are aware the behavior is not socially condoned and are often so fearful of punishment they are reluctant to seek help. In this situation the nurses first concern is to have the child medically diagnosed and treated when necessary. If the child chooses to be treated without parent knowledge he may have access to a public clinic or he may have to earn money to pay for the treatment from a private physician. The financial arrangements become the pupil's responsibility.

Before the child attends a clinic he should be prepared for the contact interview. The child needs to be familiar with the reasons for naming all sexual contacts as disease control measures. The school nurse can help the child understand this and assure him of the confidentiality of the information given to the clinic. When the child is seen and positively diagnosed by a private physician, the physician is required by statute to report the case. The child may be contacted by a venereal disease investigator requesting the same contact information. There is no way the child can escape the outcomes of this behavior and he must be helped to accept and cope with them.

The teenage pregnancy is becoming an increasing problem with the increase in the teenage population. The girl who suspects this is usually reluctant to talk about this until it can no longer be avoided. It is accepted that the teenage pregnant girl is in the high risk group, however, with adequate health and medical care, the risk is no greater than average for pregnancies in the young adult.

The school nurse is often the first to be alerted to these girls. Where the nurse is established as a helping person she may be the first adult contact for the pupil.

This situation has a multitude of problems which are difficult, at best, for the school age girl. This girl is busy with her own physical, psychological, emotional and social growth and school progress. And now she is weighted with the developing fetus and the accommodating bodily changes. Early medical supervision is of prime importance for these girls and should have first priority for the school nurses effort. Teenage pregnancy must involve the family and often the girl will request the support of the nurse in telling her parents. It is not uncommon for the nurse to deal with the couple rather than just the girl. When the putative father involves himself in the plans, his participation needs to be supported.

The school nurse and the girl become leaders in gathering a team who can provide the most acceptable outcome of this pregnancy. The girl will be allowed to attend school for varying lengths of time according to local school policy. The trend now is to encourage the girl to complete her high school program as minimum preparation for adulthood if this is at all possible. There are a variety of programs available for this and each girl must select the one most nearly suited to her.

HEALTH EDUCATION

Health education is a joint endeavor between the learner and the instructor. The instructor, as the professional has responsibility for making available the relevant information at the learner level of assimilation.

School health education has historically had a major emphasis on the anatomy and physiology of the human body and care of the ill at home. The approach has been factual and impersonal. Children often viewed health education as data to be memorized for the teacher's tests, not information for personal use.

The recognition of two systems, health care and medical care has served as impetus for defining the structures and services of each system, identifying areas of each system which are unique to the individual system and areas where the systems compliment one another. This trend to divide health and illness into separate but related concepts has increased the interest in health maintenance and health promotion. The concept of health as the absence of disease in a mechanically functioning body has been expanded. The current concept of health is the complete well-being. This is based on knowledge about the impact of disease agents on the person, plus the impact of physiological psychological, emotional, social and economic factors on the person. Research is focusing on identification of factors in the environment and the person which contributes to or creates obstacles for the complete well-being of individuals and groups in the community.

We have also changed some of our ideas of health care as we more clearly understand the relationships between people and their environment and characteristics of the disease agents. Our approach can be more realistically oriented to current scientific knowledge and less to cultural tradition.

The era of professional omnipotence is disappearing. The consumer, who has quietly questioned and often rejected the wisdom of the professional, now is demanding that he actively participate as a contributing member in all activities which have impact on him. We as professionals must consider the needs of the consumer as the consumer sees these needs and at least modify our teaching in light of the knowledge, social mores and cultural patterns of today's life styles. If we relate our teaching to today's specific needs, we have little assurance how far into the future these teachings will be of service.

Health education in the classrooms or on individual basis must be personally oriented to the learner. One approach to health education is to develop assessment procedures whereby the individual may become aware of his own health status. Then provide this individual with

methods for identifying alternative actions and the calculated risk of attaining his goal in each method, so he can knowledgeably select his style of living.

HEALTH EDUCATION CURRICULUM

The health education curriculum should be developed as a sequential coordinated series of educational experiences from kindergarten through high school.

Code of Iowa, Chapter 280.10. Stimulants, narcotics and poisons.

The board shall require all teachers to give and all scholars to receive instruction in physiology and hygiene, which study in every division of the subject shall include the effects upon the human system of alcoholic stimulants, narcotics and poisonous substances. The instruction in this branch shall of its kind be as direct and specific as that given in other essential branches, and each scholar shall be required to complete the part of such study in his class or grade before being advanced to the next higher, and before being credited with having completed the study of the subject.

Chapter 280.13 Physical education.

The teaching of physical education exclusive of interscholastic athletics, including effective health supervision and health instruction of both sexes shall be required in every public and secondary school of the state. Modified courses of instruction shall be provided for these pupils physically or mentally unable to take the courses provided for normal children.

Chapter 257.25.3...

The following shall be taught in the elementary school grades one through six:...health and physical education including the effects of alcohol, narcotics and poisons on the human body...

Chapter 257.25.6

A high school, grades nine through twelve, shall teach annually the following as a minimum program:...One unit of physical education with one-eighth unit each semester required of each pupil.

The above excerpts from the Code of Iowa delineate the health education requirements. These requirements may be met through separate health classes or by integrating the health education into related subject matter. Whichever method is developed in the local school district, the school nurse serves as a resource person to the faculty. Only school nurses who hold current teacher's certificates may assume teaching responsibilities in the classroom.

The school nurse can be expected to make pertinent contributions to the health education curriculum committees.

The school nurse can be expected to bring to the curriculum committee current trends in health and medical care based on new

scientific knowledges; cultural patterns in the community which will have implications for areas of health education; the availability of community resources and information on resources for materials which the classroom teachers will find helpful in specific topics in health education.

DENTAL HEALTH EDUCATION

Promotion of dental health is both a health program and an education program and both health and teaching personnel should be active in the project. Experts in health education are generally agreed that authentic information should be provided by those competent to supply the facts, and the instructional procedures for presenting those facts should be developed by educators. The nurse can act as a resource person providing the teachers with current information and helping them obtain teaching aids. Each teacher may then use her own judgment as to the most effective way of presenting this material in the classroom. Both should keep in mind that dental health is a "doing" subject and dental health education must be presented in such a way as to stimulate the child to apply the desired practices. Dental health education should be planned for each school grade and the level of information presented should be increased each year. It is a waste of time to merely repeat instructions each year to "brush your teeth, cut down on sweets, and visit the dentist." The child must be motivated through education to appreciate the value of a clean, healthy mouth. He must be convinced that it is within his power to determine whether he will retain his teeth throughout his life and enjoy a disease-free mouth. Dental health education cannot be evaluated by how many words the student can repeat in a classroom test but must be evaluated in terms of desired action shown by the child. The real test is whether or not he maintains his mouth in a healthy state by practicing daily the methods for prevention of dental disease which are available to him.

Teaching guides, information booklets and visual aids are available from the Bureau. The subject matter in the teaching guides should not be presented in a didactic manner while the children remain passive listeners. In order for learning of a worthwhile nature to occur and interest to grow in problems of dental health, the children must be actively engaged in working on a problem that is vital to them. Visual aids are among our best teaching devices. Pictures, models, and specimens explain more quickly and effectively than words. A combination of visual aids and reading is advisable.

In teaching dental health, a mirror or mirrors are important teaching devices. Children can make comparisons of their teeth with those of their friends by using a large mirror together. Children working in pairs may use a large mirror flat on a desk or table, and a small mirror part way in their mouth. They can get much pertinent and individual information by this method.

Pictures should be clipped and mounted attractively for bulletin board use. They can be cut from magazines or drawn by the children to make display material for group study.

Enlarging and labeling certain technical pictures for bulletin board or notebook purposes helps children to remember certain fundamentals. X-ray pictures, both originals and reprints, should be examined individually by the children. Two or three x-rays taken consecutively over a period of years would illustrate clearly the changes taking place in the mouth.

A visit by the class to a dentist's office would be a practical visual aid if an appointment could be made and transportation arranged. The curiosity bound to arise as to the results of dental study must be satisfied. A good way of doing this is by viewing objects. If a whole class can't visit an office in one trip, perhaps several children could arrange to interview their dentists in their offices and give reports. The real dentist, the real assistant, the real office and equipment are the ideal teaching materials for dental health education.

Films are available from the Information and Education Division of the Iowa State Department of Health. They are available without cost except for return postage. Booklets, pamphlets and posters are available from the Bureau of Dental Health Education. Single copies of the following material are furnished free of charge. Large quantities may be ordered direct from the American Dental Association.

I'm Going to the Dentist
Diet and Dental Health
Between 13 and 18?
You Can Prevent Tooth Decay
Have Missing Teeth Replaced
Dental X-rays and Your Health
Orthodontics
Your Child's Teeth
Dental Health Facts for Teachers
Elementary Posters (Set of 4)

Dental Projects for High
School Science Students
Scientific Reasoning and
the Fluoridation Controversy
Answers to Criticisms of
Fluoridation
You Can Teach Toothbrushing
They're Your Teeth-You
Can Keep Them
"Swish and Swallow" Posters

The material listed below is available in limited quantity.
(We suggest one pamphlet per family is sufficient.)

Your Child's First Visit to the Dentist	Your Dentist Recommends
Healthy Teeth; A Happier School Child	Fluoridation
Prevent Tooth Decay the Easy Way	Water Fluoridation: Facts
Toothbrushing	not Myths
Fluoride Helps Prevent Tooth Decay	Restricted Sugar Suggestions
	for School Parties
	Samples of National Dairy
	Council Publications on
	Dental Health

A special packet of dental health education material and posters for National Children's Dental Health Week is made available to schools each year. These may be obtained from the County Dental Health Representative in each county who represents the Council on Dental Health of the Iowa Dental Association.

Each school dental health program must be designed according to the needs of a particular school and the community it serves. Personnel from the Bureau of Dental Health Education and the Dental Health Division of the Iowa State Department of Health are available for help in establishing and reviewing school dental health programs.

ENVIRONMENTAL HEALTH

Environment is defined by Webster as the surrounding conditions, influences or forces which influence or modify. One may perceive the environment as everything outside a person, and recognize what a vast number of elements or factors are contained in this word. Every person in the school has influences on the environment and can make a positive contribution to maintaining a healthy environment. An environment which allows the people to live a reasonable comfortable and satisfying life.

The healthful school environment is one which provides the opportunity for each child to develop to the maximum his potential for becoming a usefully productive adult. To provide such an environment each individual must take an interested active role. The leadership for this phase of the school health program must come from the school administration. Only at the administrative level can all the facets be coordinated into an organized program. Health service personnel, with their basic responsibility of promoting health, are usually recognized as key members of the program. However, the building maintenance, food services, teaching and administrative personnel are members of equal importance on this team. The school administration may assign the school nurse specific responsibilities in the environmental program of the school. The school nurse serves as a health resource person, however, the school administration may assign specific duties to the nurse.

School environmental engineering includes the site of the building, construction, acoustics, lighting, food sanitation, housekeeping, insect and rodent control, air conditioning (heat, ventilation and sometimes cooling), water supply, sewage and solid waste disposal, and plumbing. Other facets of the school environment are the emotional setting of the classroom, food services, safety, facilities for physical education and athletics.

The nurse working in the schools should be alert to environmental deficiencies and hazards. Findings should be brought to the attention of the administrative staff in the school. In evaluating the physical environment the following points might be considered.

1. Drainage of the school grounds adequate to eliminate standing water on the play areas.
2. The school site is remote from sources of air pollution, insect and rodent breeding areas, heavy traffic patterns, railroads, and streams.
3. Requirements of handicapped have been considered such as width of doors, toilet facilities and ramps for changing levels.

4. High noise areas are as far as practicable from classrooms and library especially in developing new buildings.
5. General housekeeping of the building; luminaries, walls and ceilings cleaned regularly and maintained in good repair.
6. Lighting and control of sun glare adequate for the activities in every area.
7. Methods of solid waste disposal.
8. Toileting and handwashing facilities and supplies are adequate for the school population.
9. Water supply and sewage disposal is safe and adequate. Where separate from approved municipal facilities, at least annual testing through the health departments.
10. Hand rails on both sides of stairways, steps in good repair.
11. Heat sources in heavy traffic areas have protective shields.
12. Heat and ventilation adequately controlled throughout the building.

The total school environment health includes the physical and emotional health of the school personnel.

Departmental Rules and Regulations, Division IV, School Personnel 3.4(13) Annual Check for Tuberculosis. All persons employed in approved schools shall be required to undergo an annual check for tuberculosis and file the results with the board.

3.4(14) Physical examinations except as otherwise provided in rules of this department, the board shall require each employee to file with it at the beginning of his service and at three year intervals thereafter, a written medical report of a physical examination by the licensed physician who has performed said examination.

SUGGESTED FORMS FOR SCHOOL EMPLOYEES

see page 102

Bus Drivers

Code of Iowa 321.375, Drivers. The drivers of school buses must (2) be physically and mentally competent, (4) have an annual physical examination and meet all established requirements for physical fitness. Bus Driver Examination information and application form on pages ____.

It is also important to have emergency information for all school employees. This information should contain the name and telephone number of the employee's physician, the hospital of choice, and the name, address, employer if any, telephone number of next of kin or person to be notified in an emergency.

Health Examination Report

Name -

Address -

Date -

Position -

The health examination required by the Board of Education has been made by me or under my supervision and the following are the results:

Hearing: Good _____ Recommend referral for hearing evaluation _____

Vision: Good _____ with glasses _____ Recommend referral for vision evaluation _____

_____ In my opinion this individual has no physical, emotional or mental disability, is free from tuberculosis and other communicable diseases, and has no other defect which might threaten or endanger the well-being of co-workers or pupils.

_____ In my opinion this individual is physically and emotionally able at this time to perform the work assigned, but has the following disabilities or limitations. (Please indicate whether they are correctable and whether treatment is being received.)

I would recommend modification of work program as follows:

_____ On the basis of my examination, I feel this individual is not presently capable of performing the work assignment for the following reason(s).

Tuberculosis Test:

Mantoux _____

Chest X-ray _____

Signed _____

Physician

Address _____

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Paul F. Johnston, Superintendent
Des Moines, Iowa 50319

THE SCHOOL BUS DRIVER

1. School bus drivers must: (1) be at least eighteen years of age, unless such person has successfully completed an approved driver education course, in which case, the minimum age shall be sixteen years, (2) be not more than 65 years of age as of August 1 preceding the opening of the school year. The Department of Public Instruction may, at its discretion, waive the upper age limit upon application of the board of education and receipt of satisfactory physical condition of the driver.
2. School bus drivers must have current chauffeur's license. New applicants for School Bus Chauffeur's Licenses must pass a special school bus driver's written examination and must operate a school bus for the Driver's License Examiner.
3. No driver should be employed until the board has assured itself that the applicant has an acceptable driving record.
4. Applicants for the school bus driver's permit must submit signed physician's statement indicating physical fitness as follows:
 - A. Sufficient physical strength to operate the bus effectively.
 - B. Possession of full and normal use of both hands, both arms, both feet and both legs. Amputation of an arm or foot will disqualify the applicant. Amputation of more than two fingers of the hand will disqualify the applicant. In other words, the applicant should have one complete hand, and the thumb and at least two fingers of the other hand to qualify. Individual evaluations will be made for applicants who have parts of fingers missing.
 - C. Freedom from any communicable disease, such as tuberculosis.
 1. Tests for Tuberculosis
 - a. Types of tests. An applicant for a School Bus Driver's Permit may take either the Intradermal Tuberculin Skin Test or a Chest X-ray film. If the result of the Intradermal Tuberculin Skin Test is positive, however, an X-ray must be then taken. An applicant whose Chest X-ray shows any active form of Tuberculosis will be rejected. (Patch Tests are not acceptable for purposes of qualifying for a School Bus Driver's Permit.)

- b. Duration of test results. An applicant who has had a negative Intradermal Tuberculin Skin Test or a negative Chest X-ray within the twelve month period preceding September 1 of the school year in which the permit is to be issued is not required to be retested within that school year.
- c. Example--An applicant who has had either a negative Intradermal Tuberculin Skin Test or a satisfactory Chest X-ray on or after September 1, 1970, will not have to be retested to meet this requirement for a permit covering the 1971-1972 school year. On the other hand, if either test was taken prior to September 1, 1970, it will be necessary for the applicant to be retested by either method in order to qualify for a 1971-1972 permit.
- D. Freedom from mental, nervous, organic, or functional disease; including but not limited to epilepsy, paralysis, insanity, abnormal blood pressure, heart ailments or any disease that may cause a tendency to fainting. Blood pressure in excess of 170 (systolic) and 100 (diastolic) taken in a sitting position, or diabetes, will disqualify the applicant in the absence of a qualified physician's recommendation and satisfactory statement covering the significance of the condition.
- E. The applicant must have at least 20/40 vision in each eye, either normally or after correction. If the vision in one eye is near normal, visual acuity within the limits of 20/60 in the other eye will be acceptable for qualification. If corrective lenses are required to bring vision within the aforesaid limits they must be worn by the licensee at all times when operating the bus. Tunnel or barrel vision will disqualify an applicant. The applicant must have a field of vision of at least 150 degrees. The applicant must have near-normal depth perception and have no color deficiency which would interfere with safe driving.
- F. The driver must have sufficient hearing in both ears to be able to hear sirens, whistles, warning bells, signals, and other sounds related to safe operation of school buses. Should be able to hear whispered voice at distance of 20 feet. Applicant must meet this requirement without the use of a hearing aid.
- G. The driver must be mentally alert and of at least normal intelligence.

5. General character and emotional stability are qualities which must be given careful consideration by boards of education in the selection of school bus drivers.
 - A. Elements that should be considered in setting a character standard are:
 1. reliability or dependability
 2. initiative, self-reliance and leadership
 3. ability to get along with others
 4. freedom from use of undesirable language
 5. personal habits of cleanliness
 6. moral conduct above reproach
 7. honesty
 8. freedom from addiction to narcotics or habit-forming drugs
 9. freedom from addiction to alcoholic beverages or liquors
 - B. Factors to be considered in determining emotional stability are:
 1. patience
 2. considerateness
 3. even temperament
 4. calmness under stress
6. Experience in driving large vehicles, such as trucks or buses, is essential. When student drivers who have not had this experience are selected, the administration must see that they are given this experience in the operation of the school bus before permitting them to transport pupils.
7. A thorough knowledge of traffic laws and regulations shall be required of all drivers.

Division of Transportation
371A-479TSE
TR-F-6497B
CP-A33489 3/71 DI

**APPLICATION FOR
SCHOOL BUS DRIVER'S PERMIT**

DO NOT WRITE IN THIS SPACE

DATE

Issued Permit No. _____

PLEASE PRINT

Name _____ Address _____
(Last Name) (First Name)

School _____ Address _____

Date and Year of Birth _____ Age _____ Sex: M _____ F _____

Give Chauffeur's License Number _____ Expires _____

Have you driven school bus for this school? Yes _____ No _____ Number of Years _____

Applicant's signature _____

TO DEPARTMENT OF PUBLIC INSTRUCTION:

The Board of Education has selected _____ to serve as a school bus driver
for the year 19 _____ - 19 _____, at a salary of \$ _____ per month. In our opinion he meets all require-
ments for a school bus driver, and we recommend that a School Bus Driver's Permit be issued him.

_____, 19 _____
Superintendent or President of Board

PHYSICIAN'S REPORT

Height? _____ Weight? _____ Pulse? _____ Temperature? _____

Eyes: Snellen E Chart Acuity — Without Glasses Left? _____ Right? _____ Is the Field of Vision
Color Deficiency _____ With Glasses Left? _____ Right? _____ at least 150 ? _____

Ears: (without hearing aid) Right? _____ Left? _____ Is the hearing normal? _____

Heart: Any sign or symptom of disease of heart? _____ If yes, is it significant? _____

Blood Pressure Rating: Systolic _____ Normal? _____

(Sitting Position) Diastolic _____

Lungs: Any signs or symptoms of disease of lungs? _____ Breath sounds normal? _____

X-ray of lungs or Intradermal Tuberculin Skin Test: Month _____ Year _____ Results _____

Results of Urinalysis _____

Does this person possess full use of all limbs? _____

Amputation of Members: Fingers _____ Hand _____ Arm _____ Leg _____ Foot _____ Toes _____

If any member is missing, which? _____

Is there any history or evidence of epilepsy, diabetes, extremes of fluctuations in blood pressure, or other ailments
which might cause temporary loss of consciousness? _____

Did your examination find _____ to be free from all communicable
diseases? _____ Do you consider him/her physically capable in accordance with the above stated facts and stand-
ards established for bus drivers of driving a school bus and rendering such service which will not endanger the health
or lives of the pupils transported? _____

Date _____ Examining Physician _____ Address _____

BIBLIOGRAPHY

- Anderson, S.L. School Health Practice. Saint Louis: The C.V. Mosby Company, 1968.
- Bermosk, Loretta Sue, and Mordan, Mary Jane. Interviewing in Nursing. New York: The MacMillan Company, 1964.
- Bernstein, Lewis, and Dana, Richard H. Interviewing and the Health Professions. New York: Appleton--Century-Crofts Educational Division/Meredith Corporation, 1970.
- Control of Communicable Diseases in Man. New York: The American Public Health Association, 1970.
- Cromwell, Gertrude E. The Nurse in the School Health Program. Philadelphia: W.B. Saunders Company, 1963.
- Diagnostic Standards and Classification of Tuberculosis. New York: National Tuberculosis and Respiratory Disease Association, 1969.
- Family Planning. Adelphi University School of Social Work, 1968.
- Freeman, Ruth. Community Health Nursing Practice. Philadelphia: W.B. Saunders Company, 1970.
- Functions and Qualifications for School Nurses. New York: The American Nurses Association, 1966.
- Garrett, Annette. Interviewing its Principles and Methods. New York: Family Service Association of America, 1942.
- Health Appraisal of School Children. Washington, D.C. and Chicago: National Education Association and American Medical Association, 1969.
- Healthful School Environment. Washington, D.C.: National Education Association of the United States, 1969.
- Kallins, Ethel L. Public Health Nursing. Saint Louis: The C.V. Mosby Company, 1967.
- Leahy, Kathleen M., and Cobb, M. Marguerite. Fundamentals of Public Health Nursing. New York: McGraw-Hill Book Company, 1966.
- Levine, Myra Estrin. Introduction to Clinical Nursing. Philadelphia: F.A. Davis Company, 1969.
- Murchison, Irene A., and Nichols, Tomas S. Legal Foundations of Nursing Practice. London: The MacMillan Company, 1970.
- Nemir, Alma. The School Health Program. Philadelphia: W.B. Saunders Company, 1970.

Report of the Committee on School Health of the American Academy of Pediatrics. Evanston, Illinois: American Academy of Pediatrics, 1966.

School Health Services. Washington, D.C.: National Education Association, 1964.

Simon, Helen M. The Management of Health Problems of Secondary School Students. New York: Teachers College Press, 1968.

Standards of Child Health Care. Evanston, Illinois: American Academy of Pediatrics, Inc., 1967.

Stewart, Dorothy M., and Vincent, Pauline A. Public Health Nursing. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1968.

Suggested School Health Policies. Chicago: American Medical Association, 1966.

Vincent, Clark E. Unmarried Mothers. New York: The Free Press, 1961.